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Mr. Hamner, FSA

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An Analysis of 219 FSA Farm and Home Plans and Record Books in Western Kansas and the Panhandle of Oklahoma, 1940

[~~An~~ Analysis ... of farm and home plans and record books in various sections of its region XII, 1940.

Kansas Counties

Clark	Hodgeman	Seward
Finney	Kearney	Sheridan
Ford	Lane	Sherman
Gove	Logan	Stanton
Grant	Meade	Stevens
Gray	Morton	Thomas
Greeley	Ness	Wallace
Hamilton	Scott	Wichita
Haskell		

Oklahoma Counties

Beaver	Cimarron	Texas

Amarillo, Texas
October, 1941

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ANALYSIS OF FARM FAMILY RECORD BOOKS FOR AREA 2, 1940

The Farm Security Administration, Region 12, and the Division of Farm Management and Costs and the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics cooperated in the analysis of Farm Family Record Books kept by FSA clients in 1940. Due credit should be given to the farmers who kept these record books and the county FSA personnel who gave the farmers assistance and sent these books to the regional office. All preliminary tabulations and summations from these books were made by Work Projects Administration under Official Project No. 65-2-66-622.

Region 12 of the FSA was divided into six areas, principally on the basis of types of farming. Wherever possible, FSA district boundaries were followed in order that the results of the study would be directly useful to FSA district supervisors. In some cases, two or more districts are combined into one area.

To make the results of these analyses of the greatest use in planning to Farm Security Administration personnel, farms were grouped by size and type of farm and size of family. Size of farm groups were determined within each area, placing about one-half as small farms and the other half as large farms. Only two classifications were made for type of farms--crop and livestock. The type of farm classification was based on the farmer's sales and inventory reportings and on the 1940 farm plans. Size of family is reflected in the planning and consumption behavior of the families, the proportionate expenditures for various items of family living, the amount and kinds of subsistence produced on the farm, the extent of their conservation of foods program, and their household inventories. On the basis of family size, two groupings were made--families of less than five persons and those of five or more persons.

According to an FSA report dated June 24, 1941, there were 2,422 Farm Family Record Books in this area. Only 360 were sent in to the regional office to be used in this study. Of these, 219 were complete enough for use in this report. Tables are presented with brief explanatory statements that should furnish assistance and guidance to county and district FSA personnel in the working out of farm and home plans.

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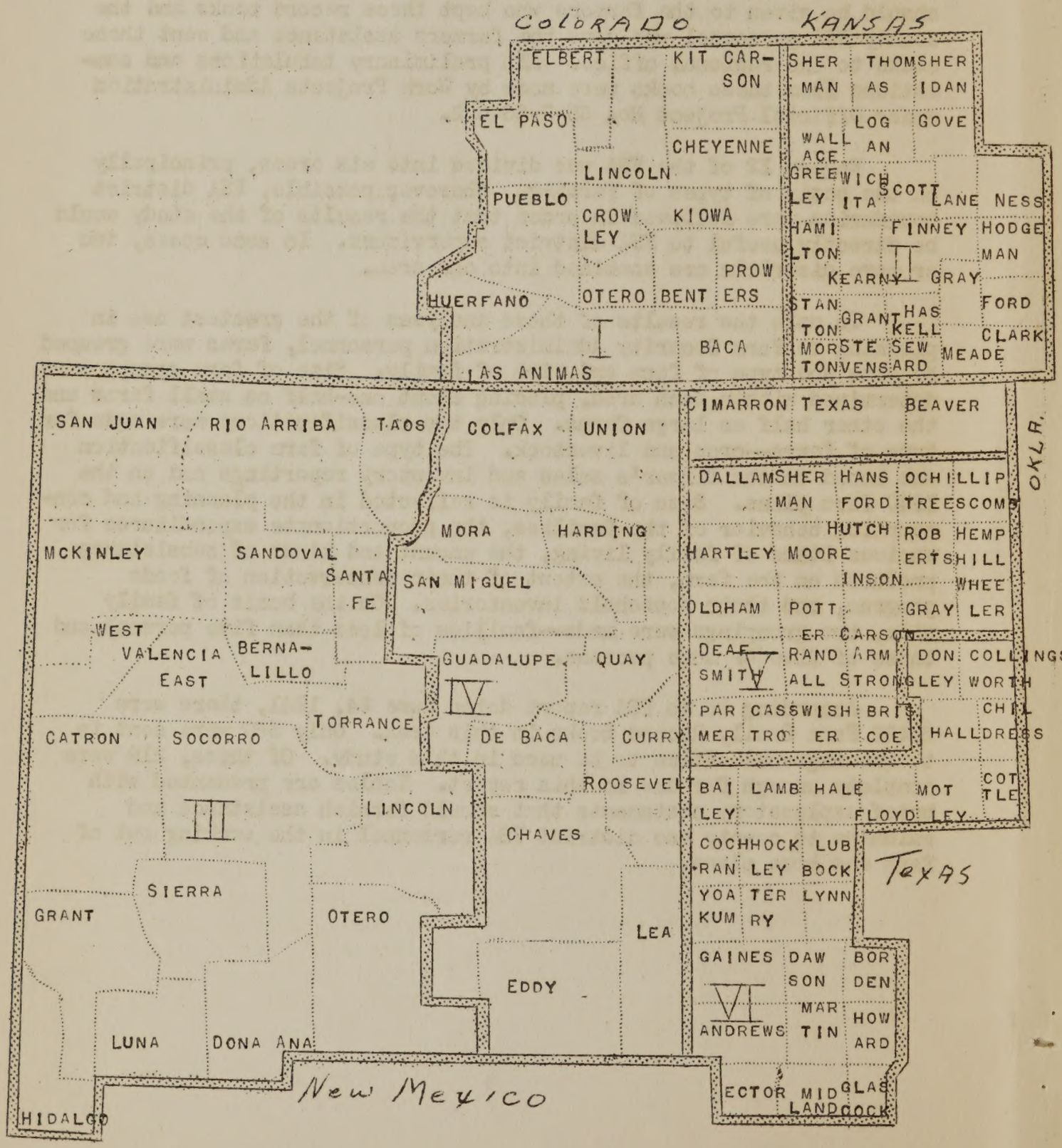
ANALYSIS OF FSA RECORDS BY AREAS FOR REGION XII



SUMMARY AND RECOMMENDATIONS

1. The actual results deviated considerably from the planned for a number of items. Crop sales were 45 percent of the planned, indicating crop yields were lower than normal or plans were not based on normal conditions. Planned expenses for automobiles, hired labor, and capital goods were consistently too low. Record books kept on the farms in previous years should serve as a guide in making new farm plans.

2. Dairy products sold and used in the home averaged 122 pounds of butterfat per dairy cow. Eggs sold and used in the home averaged 76 eggs per hen. Improvements in the quality of livestock and the methods of feeding and handling are urgently needed.

3. Family farm earnings, cash net farm incomes, non-farm incomes, and increases in net worth were larger on large farms than on small farms. Livestock farms had no important advantage over crop farms in 1940 as to incomes earned. However, livestock farms had lower expenses per $100 gross farm income and the debt load was less than on crop farms.

4. Loans to meet current farm and home expenses were necessary from March to June inclusive on both crop and livestock farms.

5. Sixty-nine percent of the families increased their net worth in 1940, 33 percent decreased indebtedness, and 81 percent increased assets. Indebtedness should be liquidated or increased depending on the circumstances of the individual cases, such as the quality and type of land, machinery, livestock, labor, and management available. The success of the FSA loan programs will depend to a great extent on the accuracy of judging the abilities of the clients. Records pertaining to physical production such as yields of crops, mortality of livestock, eggs per hen, butterfat per dairy cow, pigs per litter, and percent of cows raising calves are extremely important in judging managerial ability.

6. Actual expenditures for family living of all the families were $19 below the planned expenditures. Food expenditures, however, were $26 in excess of the planned expenditures. For all other items of family lving except "other" expenditures were below those planned. It is realized that a number of factors may have accounted for the fact that the planned expenditures for the various items were in excess of the actual expenditures. At least the supervisors should make an objective appraisal of their planning to determine whether the planned expenditures were justified in light of actual performance by the families. Closer scrutiny of records kept by the clients during previous year or years is strongly recommended.

7. Eighty-five families underplanned and 134 families overplanned their living expenditures. One-third of the families deviated from their plans in excess of $100. Those families who underplanned did so in the average amount of $95 and those who overplanned did so in the average amount of $92.

8. Family living expenditures varied as much as a third from the low to the high month. These expenditures reached their peak in December after a somewhat uneven trend toward an increase during the summer and fall. With a type of farming that would provide an even flow of income throughout the year, family living expenditures would tend to distribute themselves evenly from month to month.

9. Sixty percent of the total value of food consumed was produced on the farm. It is highly desirable that this be at least 75 percent. With greater production of foods from the farm, certain of the resources normally apportioned to food expenditures would then be released for expenditure on other necessities or satisfactions. The small families produced $206 worth of food for the table and the large families $280 worth. Over nine-tenths of this was from livestock and livestock products.

10. The families in this study averaged putting up 275 quarts of fruits, vegetables, and meats. In 1939 a similar group of families in this area averaged 247 quarts. This indicates a slight improvement in performance during 1940 over that of 1939. However, the carry-over of canned foodstuffs from 1939 was considerably below that considered essential for adequate provisioning of the families until the next fresh fruit and vegetable season. Also, it was far below the quantity that the families should carry over to provision themselves for an additional twelve months in the event of drought or other adverse conditions.

Practically no difference existed between the value of the household inventory of the small families and the large families. Inasmuch as this is the case, it can be assumed that the large families are using less expensive items and likewise that replacements will need to be made sooner. The small families showed a slightly greater frequency among those items that give aesthetic as well as utilitarism satisfactions, such as easy rockers, radios, floor coverings, and refrigerators.

SIZE OF FARMS AND FAMILIES, INVENTORIES OF FEED AND LIVESTOCK
(Table 1 discussed)

Farms with 500 acres or more were classed as large farms, less than 500 acres were classed as small farms. Small crop and small livestock farms were similar in that their average sizes were 351 and 385 acres and each group had approximately one-fourth of the land in permanent pasture. Large livestock farms averaged 837 acres of land per farm with 42 percent in permanent pasture and large crop farms averaged 731 acres with 25 percent in permanent pasture.

The average quantity of grain and roughage on hand at the beginning of the year did not appear adequate for the livestock on the farms except on large crop farms. By the end of the year all groups had increased their supplies of both grain and roughage. At the end of the year the average roughage per livestock unit of work-stock and cows was three tons on small livestock farms and small crop farms, 4 tons on large livestock farms, and 10 tons on large crop farms.

Sixty percent of the 148 livestock farms had work-stock compared to only 23 percent of the crop farms. The number of dairy cows increased on all groups of farms during 1940. At the end of the year the average number of dairy cows per farm was approximately 7 head on small livestock farms and 5 head on small crop farms compared to 8 head on large livestock farms and 6 head on large crop farms. Beef cows were found principally on large livestock farms but for this group they averaged only 3.5 head per farm at the end of the year. Sheep were found on 3 of the small livestock farms and 4 of the large livestock farms. All farms averaged 89 hens per farm at the beginning of the year. Six farmers reported no chickens.

Table 1. Acres of land, size of families, and inventories of feed and livestock for farms by size and types in Area 2, 1940.

Item	Unit	Average Per Farm				
		Small Farms		Large Farms		All Farms
		Livestock	Crop	Livestock	Crop	
Number of farms	No.	79	37	69	34	219
Cropland	Acres	255	282	458	520	365
Permanent Pasture	Acres	83	88	355	184	185
Total land in farms	Acres	351	385	837	731	569
Persons in the family	No.	5.0	5.5	5.1	5.4	5.2
Adult males 16 yrs. or more	No.	1.3	1.5	1.4	1.5	1.4
Grain						
January 1	Bu	49	36	102	151	79
December 31	Bu	171	103	424	385	273
Roughage						
January 1	Ton	8	6	17	16	12
December 31	Ton	27	19	57	70	42
Work-stock						
January 1	No.	1.7	.4	2.4	.5	1.5
January 1	Dol	90	20	112	25	75
Dairy Cows						
January 1	No.	6.5	3.9	7.4	4.1	6.0
December 31	No.	7.1	5.0	8.2	5.9	6.9
Beef Cows						
January 1	No.	.5	.2	2.6	.5	1.1
December 31	No.	.2	.2	3.5	.8	1.3
Sows						
January 1	No.	1.0	.9	1.2	1.0	1.0
Sheep						
January 1	No.	.8	0.0	.6	0.0	.5
Hens						
January 1	No.	86	70	102	89	89
Productive Livestock Units 1/						
January 1		8.3	5.1	11.5	5.8	8.4

1/ Productive livestock units were calculated from the beginning inventory of dairy cows, beef cows, sows, sheep, and hens.

INVENTORIES OF FARM PROPERTY, HOUSEHOLD PROPERTY AND INDEBTEDNESS
(Table 2 discussed)

There was little change in the number of tractors during the year, but the value of tractors increased on all groups of farms, indicating that old tractors were traded for newer models. The average value per tractor on the large crop farms was $268 at the beginning of the year and $453 at the end of the year. Ninety-three per cent of the farmers on crop farms reported they owned tractors, compared with eighty percent of the farmers on livestock farms. The inventories showed that ninety-four percent of the farmers on crop farms and eighty percent of the farmers on livestock farms owned automobiles. The value of other machinery increased on all groups of farms. The largest increase was $51 per farm on large crop farms.

The acreage of land owned by the farm operators did not change during the year, but there was some change in the inventory value of real estate. At the beginning of the year, real estate was valued at $15.65 per acre, compared to $15.73 at the end of the year. Twenty-seven percent of the farmers on livestock farms and thirty-eight per cent of the farmers on crop farms owned all or part of the land operated.

The inventory value of farm property owned by the operators increased during the year on all groups of farms. The smallest average increase was $317 per farm on small livestock farms and the largest increase was $831 per farm on large crop farms. Increases in livestock, feed and supplies accounted for more than four-fifths of the increase in farm property on livestock farms, but on crop farms approximately one-third of the increase was in tractors and other machinery. There was little change in the household inventory or the inventory of cash, savings, and accounts due.

Indebtedness to FSA and total indebtedness increased during 1940 on all groups of farms but the increase was greater on large farms. The average increase in indebtedness to FSA on the 219 farms was $299 per farm. Total indebtedness increased only $251, indicating that $48 of the money borrowed from FSA was used to pay debts owed to other persons or agencies. FSA supervisors should assist farmers in arranging debt payment programs with their creditors.

Table 2. Inventories of farm Property, Household Property, and Indebtedness for families grouped according to size and type of the farms, Area 2, 1940

Item		Unit	Average Per Farm				
			Small Farms		Large Farms		All Farms
			Livestock	Crop	Livestock	Crop	
Farms		No.	79	37	69	34	219
Tractors	Jan. 1	No	0.8	0.8	0.9	0.9	0.8
	Jan. 1	Dol	165	185	283	241	217
	Dec. 31	No	0.8	1.0	0.9	1.0	.9
	Dec. 31	Dol	183	278	318	453	283
Autos or trucks	Jan. 1	No.	1.0	1.2	1.2	1.2	1.1
	Jan. 1	Dol	88	134	130	130	115
	Dec. 31	No	1.0	1.2	1.2	1.3	1.1
	Dec. 31	Dol	84	131	129	204	125
Other machinery	Jan. 1	Dol	215	198	318	360	267
	Dec. 31	Dol	225	228	360	411	297
Livestock	Jan. 1	Dol	666	380	855	466	646
	Dec. 31	Dol	819	519	1188	711	868
Feed & supplies	Jan. 1	Dol	149	154	237	318	205
	Dec. 31	Dol	299	324	567	600	434
Real Estate Owned	Jan. 1	Ac.	61	84	114	80	84
	Jan. 1	Dol	913	1701	1629	1196	1315
	Dec. 31	Ac.	61	84	114	80	84
	Dec. 31	Dol.	903	1702	1672	1163	1321
Total Farm Inventory	Jan. 1	Dol	2196	2752	3452	2711	2765
	Dec. 31	Dol	2513	3182	4234	3542	3328
Household Inventory	Jan. 1	Dol	207	238	264	338	250
	Dec. 31	Dol	231	250	279	340	266
Cash, Savings, and accounts due	Jan. 1	Dol	179	159	234	284	210
	Dec. 31	Dol	171	91	265	224	195
Total Assets 1/	Jan. 1	Dol	2582	3149	3950	3333	3225
	Dec. 31	Dol	2915	3523	4778	4106	3789
Indebtedness to FSA	Jan. 1	Dol	959	1115	1426	1150	1162
	Dec. 31	Dol	1181	1355	1729	1684	1461
Total Indebtedness 2/	Jan. 1	Dol	2050	2606	2916	2792	2532
	Dec. 31	Dol	2199	2857	3212	3189	2783

1/ Includes real estate owned
2/ Includes real estate mortgages on real estate owned.

CASH RECEIPTS AND EXPENSES, ALL FARMS
(Table 3 discussed)

For all farms analyzed in Western Kansas and the Panhandle of Oklahoma, total cash farm receipts averaged $246 per farm less than planned. Actual crop sales of only $172, or $212 less than planned, was principal reason for the lower than planned cash farm receipts. Eighty-six of the 219 books contained crop production records. For these records the planned wheat yield was 7.0 bushels, actual 6.2 bushels; planned corn yield 9.7 bushels, actual 4.3 bushels; planned barley yield 11.6 bushels, actual 13.2 bushels; planned grain sorghum yield 10.2 bushels, actual 13.9 bushels; and the planned forage sorghum yield 1.2 tons, actual 1.3 tons. It is probable that the actual acreages and production reported by farmers were for acres harvested while planned yields were for acres planted and that farmers having poor yields often did not report. Some of the discrepancy between actual and planned crop sales may have been caused by farmers feeding or storing a larger than planned portion of the crops produced.

Eleven farmers reported egg production that averaged 112 eggs per hen. Twenty-two farmers reporting on chicks raised had lost 19 percent of their chicks before the chicks were two months old. The average butterfat production for nine farms having this information available was 236 pounds per cow. Hog receipts were $29 per farm; the farms averaged one sow on hand at the beginning of the year. Records on pig production on five farms averaged seven pigs per litter. Too few of the farmers reported the physical production of livestock to give reliable averages for the groups of farms used in this analysis. Indications of the production of dairy cows and hens can be obtained by using average prices of the products sold per cow and per hen. Dairy products sold averaged $27.91 per dairy cow. Assuming the average price of butterfat sold to be 25 cents per pound the farmers sold 111 pounds per cow making a total of 122 pounds per cow. when butterfat used in the home is included. Eggs sold averaged 65 cents per hen. Assuming the average price of eggs sold to be 14 cents per dozen, the farmers sold 56 eggs per hen, making a total of 76 eggs per hen when eggs reported used in the home are included.

Actual farm expense items were more than planned except expenses for feed, other farm expense, and crops. All actual current farm cash expenses were one percent less than planned and averaged $1.90 per acre of cropland. Family living expenditures averaged five percent less than planned.

Table 3 A comparison of the actual and planned receipts and expenses for 219 farms in Area 2, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	172	384	- 212	45
Poultry	37	49	- 12	76
Eggs	58	101	- 43	57
Dairy products	178	187	- 9	95
Cattle	114	151	- 37	75
Hogs	29	54	- 25	54
Other livestock	8	16	- 8	50
Other (farm)	79	41	+ 38	193
AAA payments	321	259	+ 62	124
Cash farm receipts	996	1242	- 246	80
Other income	236	113	+ 123	209
Money borrowed	669	453	+ 216	148
Total cash received	1901	1808	+ 93	105
Home produced foods 3/	245	319	- 74	77
Total	2146	2127	+ 19	101
Expenses				
Feed	108	118	- 10	92
Crops	115	144	- 29	80
Automobile	94	68	+ 26	138
Tractor and truck	170	148	+ 22	115
Other machinery	63	53	+ 10	119
Building and land	9	7	+ 2	129
Livestock	14	10	+ 4	140
Hired labor	43	25	+ 18	172
Other (farm)	76	125	- 49	61
Current farm cash expenses	692	698	- 6	99
Capital goods	356	271	+ 85	131
Debt payments	490	430	+ 60	114
Family living expenditures	393	413	- 20	95
Total cash expended	1931	1812	+ 119	106
Home produced foods 3/	245	319	- 74	77
Total	2176	2131	+ 45	102

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 206 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON SMALL LIVESTOCK FARMS
(Table 4 discussed)

The actual cash farm receipts averaged $805 per farm and were $205 less than planned. All items of farm receipts were less than planned except other farm receipts and AAA payments. Most of the discrepancy between actual and planned receipts resulted from actual crop sales being $173 less than planned. Since farm receipts were less than planned it was necessary for farmers to increase the amounts received from other sources. Other income not from the farm was $103 per farm more than planned and money borrowed was $224 more than planned.

Cash farm expenses for feed, other farm expense, and crops were less than planned; expenses for automobile, tractor and truck were more than planned; and the other items were about as planned. Total current farm cash expenses were $31 less than planned. However, actual capital goods purchased were $89 more than planned. Family living expenditures were $35 less than planned.

Actual cash net farm income, which is the difference between cash farm receipts and current farm cash expenses, was $265 per farm on small livestock farms compared to $222 on small crop farms, $348 on large livestock farms, and $389 on large crop farms. The planned cash net farm income was $439 for small livestock farms, $470 for small crop farms, $622 for large livestock farms, and $709 for large crop farms. Both actual and planned net cash farm incomes were greater on large farms. Actual current farm cash expenses were 67 percent of the cash farm receipts on small livestock farms compared to 75 percent on small crop farms, 69 percent on large livestock farms, and 70 percent on large crop farms. There appears to be a tendency for current farm cash expenses to be a smaller portion of the cash farm receipts on livestock farms than on crop farms.

Capital goods expenditures were 58 percent more than planned for small livestock farms as compared to 31 percent more than planned for all farms. These departures from the planned for capital goods can not be justified because of possible abnormal weather conditions. If incomes had exceeded the planned incomes one would expect a part of the surplus to be inveested in new capital, but since incomes were below the planned, it appears that the needs for additional livestock and equipment were not carefully investigated for individual farms when the plans were made.

Table 4. A comparison of the actual and planned receipts and expenses for 79 small livestock farms in Area 2, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	72	245	- 173	29
Poultry	37	53	- 16	70
Eggs	58	98	- 40	59
Dairy products	186	198	- 12	94
Cattle	120	146	- 26	82
Hogs	27	48	- 21	56
Other livestock	10	16	- 6	62
Other (farm)	49	30	+ 19	163
AAA payments	246	176	+ 70	140
Cash farm receipts	805	1010	- 205	80
Other income	179	76	+ 103	236
Money borrowed	483	259	+ 224	186
Total cash received	1467	1345	+ 122	109
Home produced foods 3/	224	304	- 80	74
Total	1691	1649	+ 42	103
Expenses				
Feed	108	122	- 14	88
Crops	88	110	- 22	80
Automobile	82	59	+ 23	139
Tractor and truck	130	111	+ 19	117
Other machinery	47	47	0	100
Building and land	7	6	+ 1	117
Livestock	10	8	+ 2	125
Hired labor	17	15	+ 2	113
Other (farm)	51	93	- 42	55
Current farm cash expenses	540	571	- 31	94
Capital goods	242	153	+ 89	158
Debt payments	343	318	+ 25	108
Family living expenditures	351	386	- 35	91
Total cash expended	1476	1428	+ 48	103
Home produced foods 3/	224	304	- 80	74
Total	1700	1732	- 32	98

1/ Actual minus the planned.
2/ Planned = 100 percent
3/ An average of 70 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON SMALL CROP FARMS
(Table 5 discussed)

Actual cash farm receipts of $904 on small crop farms were less than planned by $190. Receipts were less than planned for all items except other farm receipts and AAA payments. Actual crop sales were $197 less than planned on small crop farms compared to $173 less than planned on small livestock farms. Other income not from the farm was $105 more than planned, money borrowed $187 more than planned, and home produced foods $81 less than planned on small crop farms.

Automobiles, tractor and trucks, feed, and hired labor expenses were more than planned; other farm expense and crop expense were less than planned; and the remaining items were about as planned on small crop farms. This was similar to the results on the small livestock farms except that feed and hired labor expenses were less than planned on the small livestock farms, but more than planned on small crop farms. Average current farm cash expenses were $58 more than planned on small crop farms. Expenses for capital goods were $30 more than planned and family living expenditures $18 less than planned.

Eggs sold on small crop farms were 50 percent of the planned, the lowest of any group, but available data indicates that egg production was higher for this group than for other groups of farms. Eggs sold averaged 74 cents per hen on small crop farms compared to 67 cents on small livestock farms, 56 cents on large livestock farms, and 73 cents on large crop farms. There was an average of 70 hens per farm on small crop farms at the beginning of the year.

Table 5. A comparison of the actual and planned receipts and expenses for 37 small crop farms in Area 2, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	275	472	- 197	58
Poultry	22	32	- 10	69
Eggs	52	104	- 52	50
Dairy products	119	123	- 4	97
Cattle	59	70	- 11	84
Hogs	12	48	- 36	25
Other livestock	1	11	- 10	9
Other (farm)	83	46	+ 37	180
AAA payments	281	188	+ 93	149
Cash farm receipts	904	1094	- 190	83
Other income	258	153	+ 105	169
Money borrowed	570	383	+ 187	149
Total cash received	1732	1630	+ 102	106
Home produced foods 3/	221	302	- 81	73
Total	1953	1932	+ 21	101
Expenses				
Feed	86	80	+ 6	108
Crops	117	129	- 12	91
Automobile	99	58	+ 41	171
Tractor and truck	168	141	+ 27	119
Other machinery	64	60	+ 4	107
Building and land	7	8	- 1	88
Livestock	18	8	+ 10	225
Hired labor	57	19	+ 38	300
Other (farm)	66	121	- 55	54
Current farm cash expenses	682	624	+ 58	109
Capital goods	299	269	+ 30	111
Debt payments	410	412	- 2	100
Family living expenditures	394	412	- 18	96
Total cash expended	1785	1717	+ 68	104
Home produced foods 3/	221	302	- 81	73
Total	2006	2019	- 13	99

1/ Actual minus the planned
2/ Planned = 100 percent
3/ An average of 36 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON LARGE LIVESTOCK FARMS
(Table 6 discussed)

Average actual and planned farm receipts for large livestock farms were similar to the other groups. Total cash farm receipts were 79 percent of the planned compared to 83 percent on small livestock farms and 80 percent on large and small crop farms. All receipt items on large livestock farms were less than planned except other farm receipts and AAA payments. Cash farm receipts were $291 less than planned principally because crop sales were $230 less than planned. Other income not from the farm was $126 more than planned and money borrowed $223 more than planned.

Current farm cash expenses were 98 percent of the planned on large livestock farms. Other farm expense was $61 less than planned, crop expense $48 less than planned, but tractor and truck, automobile, and other machinery expense were $78 more than planned. Planned automobile expense was consistently too low for all groups of farms. Actual automobile expense was more than planned by 32 percent on large livestock farms, 39 percent on small livestock farms, 71 percent on small crop farms, and 22 percent on large crop farms. Capital goods purchased were $80 more than planned, debt payments $81 more than planned, and family living expenditures $11 less than planned on large livestock farms.

Farmers on the large livestock farms were probably more successful with their dairy enterprises than farmers on other farms. Dairy products sold per dairy cow were higher and feed expense per animal unit (table 8) were lower on large livestock farms than on other groups of farms. Dairy products sold averaged $29.10 per dairy cow on large livestock farms compared to $27.35 on small livestock farms, $26.44 on small crop farms, and $24.80 on large crop farms. One would expect the dairy products sold per dairy cow to be slightly less on the crop farms because there were fewer cows on the crop farms than on the livestock farms and a greater portion of the dairy products produced would be used in the home.

Table 6. A comparison of the actual and planned receipts and expenses for 69 large livestock farms in Area 2, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	100	330	- 230	30
Poultry	38	50	- 12	76
Eggs	57	106	- 49	54
Dairy products	227	240	- 13	95
Cattle	175	236	- 61	74
Hogs	45	68	- 23	66
Other livestock	10	15	- 5	67
Other (farm)	97	44	+ 53	220
AAA payments	371	322	+ 49	115
Cash farm receipts	1120	1411	- 291	79
Other income	234	108	+ 126	217
Money borrowed	769	546	+ 223	141
Total cash received	2123	2065	+ 58	103
Home produced foods 3/	284	348	- 64	82
Total	2407	2413	- 6	100
Expenses				
Feed	126	133	- 7	95
Crops	118	166	- 48	71
Automobile	100	76	+ 24	132
Tractor and truck	191	155	+ 36	123
Other machinery	64	46	+ 18	139
Building and land	11	10	+ 1	110
Livestock	19	14	+ 5	136
Hired labor	50	35	+ 15	143
Other (farm)	93	154	- 61	60
Current farm cash expenses	772	789	- 17	98
Capital goods	392	312	+ 80	126
Debt payments	564	483	+ 81	117
Family living expenditures	407	418	- 11	97
Total cash expended	2135	2002	+ 133	107
Home produced foods 3/	284	348	- 64	82
Total	2419	2350	+ 69	103

1/ Actual minus the planned
2/ Planned = 100 percent.
3/ An average of 67 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON LARGE CROP FARMS
(Table 7 discussed)

Cash farm receipts were larger on large crop farms than for other groups. On the large crop farms, actual cash farm receipts were $1285, compared to $1120 on large livestock farms, $904 on small crop farms, and $805 on small livestock farms. More land or the expansion of intensive enterprises is needed for the families on small farms to increase the size of their farm businesses. Improvements should be made in the quality of livestock and methods of feeding and handling of livestock before livestock enterprises will become a successful means of increasing the size of farm businesses on farms with small acreages. AAA payments gave some advantage to crop farms over livestock farms. AAA payments on small crop farms were $35 more per farm than on small livestock farms and on large crop farms they were $67 more than on large livestock farms.

Total current farm cash expenses were $7 per farm more than planned on large crop farms compared to $58 more than planned on small crop farms, $17 less than planned on large livestock farms, and $31 less than planned on small livestock farms. Feed and crop expense was approximately one-fifth less than planned, but other machinery expense was one-third more than planned and hired labor more than twice the planned on large crop farms.

Families on large crop farms used more credit during 1940 than other groups. They borrowed $1005 per farm, compared to $769 for large livestock farms, $570 for small crop farms, and $483 for small livestock farms. The money borrowed by families on large crop farms was equal to $78 for each $100 of cash farm receipts compared to $69 for large livestock farms, $63 for small crop farms, and $60 for small livestock farms. However, larger amounts of capital goods were purchased on large farms than on other groups. When the amount spent for capital goods was deducted from the amount of money borrowed it was evident that there was little difference between crop and livestock farms in the amount of credit used for other than the purchase of capital goods. Money borrowed per farm in excess of capital goods purchased was $394 for large crop farms compared to $377 for large livestock farms, and $271 for small crop farms compared to $241 for small livestock farms. Families on large crop farms increased investments in machinery more than other families in 1940.

Table 7. A comparison of the actual and planned receipts and expenses for 34 large crop farms, in Area 2, 1940

Source of receipts or expenses	Average per farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	438	721	- 283	61
Poultry	49	54	- 5	91
Eggs	65	96	- 31	68
Dairy products	124	128	- 4	97
Cattle	40	75	- 35	53
Hogs	22	47	- 25	47
Other livestock	4	19	- 15	21
Other (farm)	105	56	+ 49	188
AAA payments	438	402	+ 36	109
Cash farm receipts	1285	1598	- 313	80
Other income	344	164	+ 180	210
Money borrowed	1005	795	+ 210	126
Total cash received	2634	2557	+ 77	103
Home produced foods 3/	238	312	- 74	76
Total	2872	2869	+ 3	100
Expenses				
Feed	97	119	- 22	82
Crops	170	192	- 22	88
Automobile	104	85	+ 19	122
Tractor and truck	225	224	+ 1	100
Other machinery	96	73	+ 23	132
Building and land	10	2	+ 8	500
Livestock	10	12	- 2	83
Hired labor	77	36	+ 41	214
Other (farm)	107	146	- 39	73
Current farm cash expenses	896	889	+ 7	101
Capital goods	611	468	+ 143	130
Debt payments	767	599	+ 168	128
Family living expenditures	464	469	- 5	99
Total cash expended	2738	2425	+ 313	113
Home produced foods 3/	238	312	- 74	76
Total	2976	2737	+ 239	109

1/ Actual minus the planned.
2/ Planned = 100 percent
3/ An average of 33 families keeping a record of farm products used in the home.

MONTHLY TRENDS OF RECEIPTS AND EXPENSES
(Figures 1 and 2 discussed)

Receipts, other than loans, were less than farm and home expenses from March to June inclusive, and in August for livestock farms. Crop farms were similar in that expenses were more than receipts from March to June, but in the fall expenses on crop farms exceeded receipts in September and October. During months when expenses are more than receipts farmers must use some kind of credit if they do not have cash reserves.

Monthly receipts were more constant but usually lower on livestock farms than on crop farms. Receipts on livestock farms were lower than on crop farms in all months except January, March, and April. Receipts were above $100 in January, July, and December on livestock farms and in January, February, July, August, November, and December on crop farms. A seasonal peak in receipts of $159 per farm came in January for livestock farms compared to a seasonal peak of $195 in July for crop farms.

Monthly farm expenses were lower and more constant on livestock farms than on crop farms. On livestock farms the farm expenses rose steadily from $36 in January to a seasonal peak of $71 in May and then declined slowly for the remainder of the year to $38 in December. Farm expenses on crop farms increased steadily from a low of $34 in January and February to a seasonal peak of $110 in July and then declined to $81 in November. The monthly receipts and expenses on crop farms reached a seasonal peak in July because of the importance of the wheat enterprise.

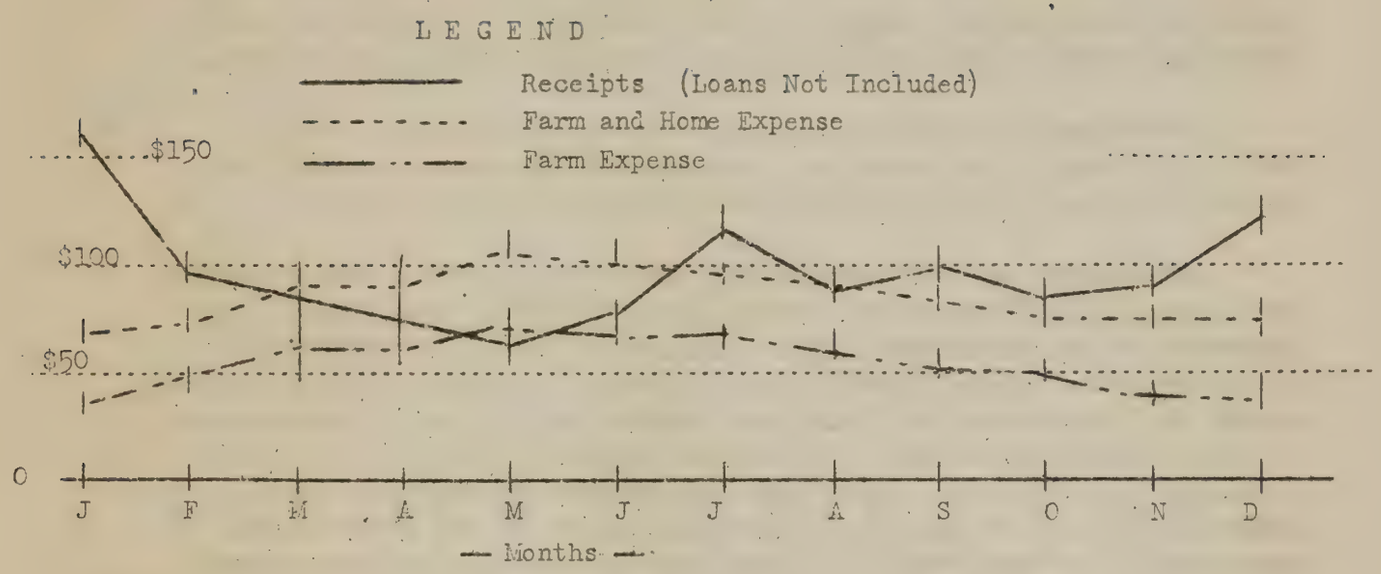


FIGURE 1. A Comparison of Average Monthly Receipts and expenses for 148 Livestock Farms in Area 2, 1940.

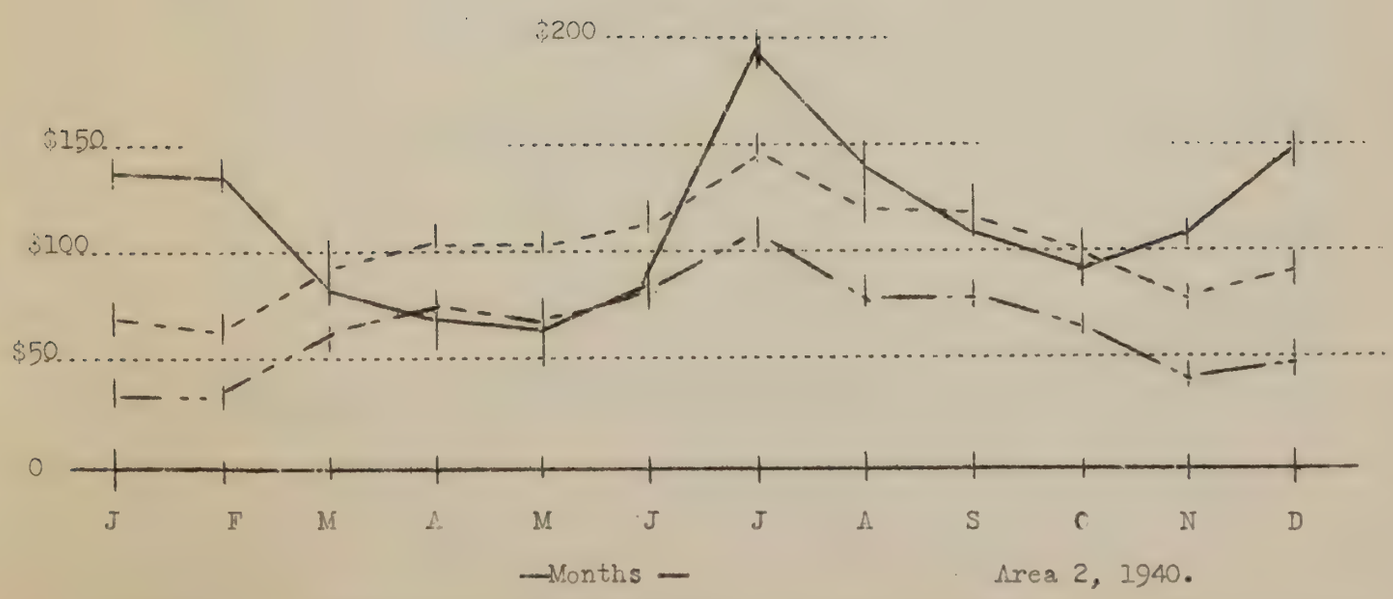


FIGURE 2. A comparison of Average Monthly Receipts and Expenses for 71 Crop Farms

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS ON SMALL FARMS (Figure 3 discussed)

Forty of the 116 families on small farms decreased their net worth in 1940. Four of the families decreasing their net worth decreased both their debts and their assets, 18 increased both debts and assets, and 18 increased debts but decreased assets.

Seventy-six families increased their net worth. Six of these decreased both debts and assets, 29 decreased debts but increased assets, and 41 increased both debts and assets.

The change in net worth indicates the progress the families have made towards becoming rehabilitated during the year. An increase in indebtedness may be desirable if it is accompanied by an increase in net worth over a period of years. Indebtedness should be liquidated or increased depending on the circumstance of the individual cases such as the quantity and type of land, machinery, livestock, labor and management available. Major emphasis should be placed on the abilities of the individual operators to manage various sizes and types of farm businesses. The success of the FSA loan programs will depend to a great extent on the accuracy of judging the abilities of the clients. Records pertaining to physical production such as yields of crops, mortality of livestock, eggs per hen, butterfat per dairy cow, pigs per litter, and percent of cows raising calves are extremely important in judging managerial ability.

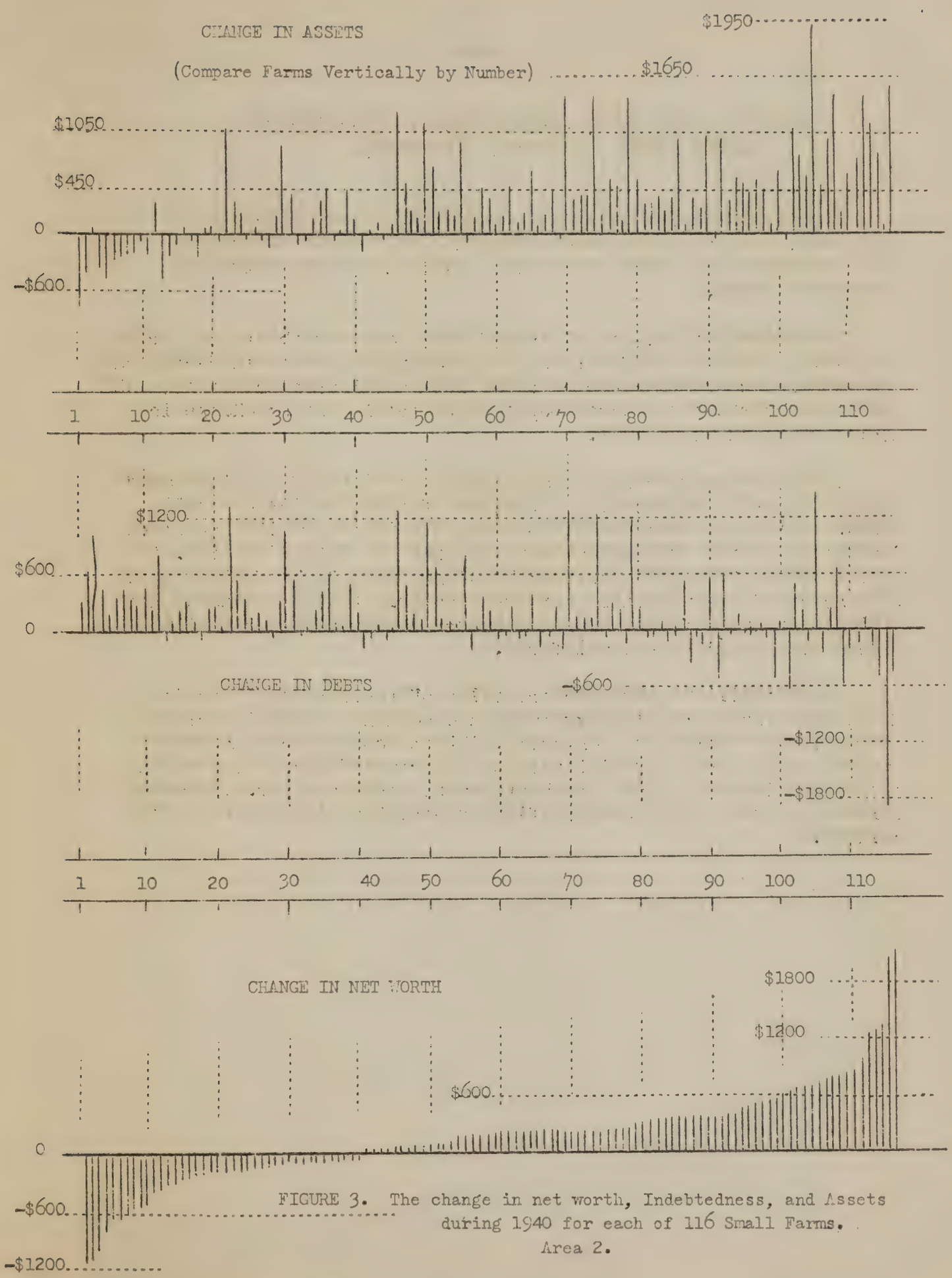


FIGURE 3. The change in net worth, Indebtedness, and Assets during 1940 for each of 116 Small Farms. Area 2.

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS ON LARGE FARMS (Figure 4 discussed)

Twenty-seven of the families on large farms decreased their net worth. Six of these decreased both their debts and assets, 17 increased both debts and assets, and 4 increased debts but decreased assets.

Seventy-six families on large farms increased their net worth in 1940. Three of the families increasing their net worth decreased both debts and assets, 24 decreased debts but increased assets, 48 increased both debts and assets, and one family had no change in debts but increased assets.

Seventy-four percent of the families on large farms increased their net worth compared to 66 percent of the families on small farms. Debts were decreased by 32 percent of the families on large farms and assets were increased by 87 percent of the families. On small farms debts were decreased by 34 percent of the families and 76 percent of the families increased assets. It is concluded that families on large farms made more progress in becoming rehabilitated than families on small farms.

A few families increased the value of their real estate in the ending inventory although there had been no change in acreage and no improvements had been built. This tends to show increases in net worth where no real increase had occurred and results in a distorted picture of the farm business for any one year. Inventory values of real estate should reflect a normal value and be rarely changed.

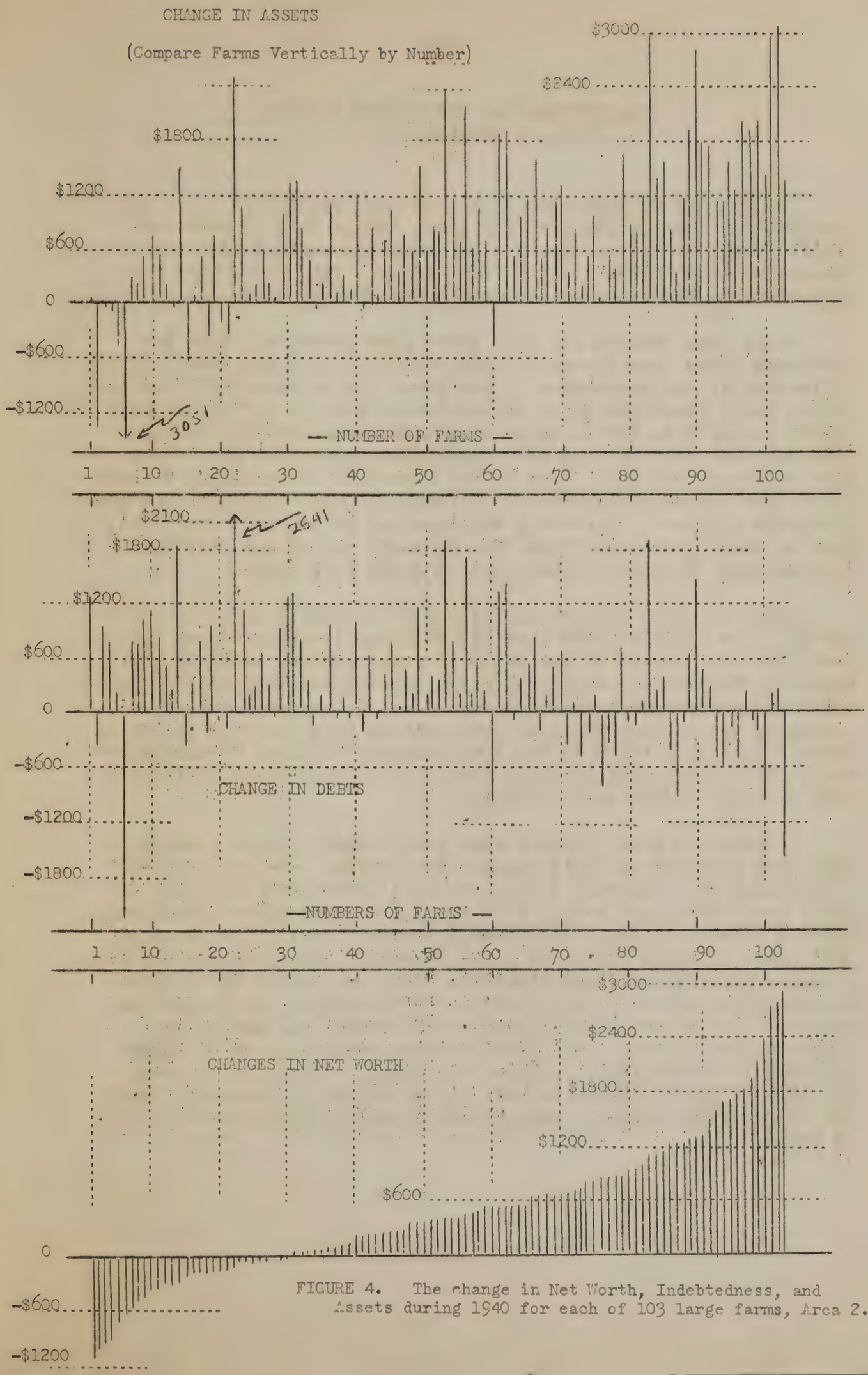


FIGURE 4. The change in Net Worth, Indebtedness, and Assets during 1940 for each of 103 large farms, Area 2.

ORGANIZATION AND EFFICIENCY FACTORS
(Table 8 discussed)

Investments in power and machinery were greater per acre of cropland for small farms than for large farms. Cash tractor and truck and all machinery expenses per acre of cropland also were greater on small farms than on large farms. This shows that more efficient use of machinery was obtained on large farms.

Total farm expense per $100 gross farm income was less for livestock farms than for crop farms. Size of crop farms made little difference in the proportion of the gross income needed for expenses, but on small livestock farms expenses were $58 per $100 gross farm income compared to $53 on large livestock farms. Small crop farm expenses were $63 for each $100 gross farm income and large crop farm expenses were $64. Part of the favorable relationship between gross farm income and expenses on livestock farms resulted from low livestock expenses. Livestock expenses per animal unit were $7.11 less on small livestock farms than on small crop farms and $6.55 less on large livestock farms than on large crop farms.

Debts per $100 of farm property were extremely high for all groups. The lightest debt load was on large livestock farms where debts were 84 percent of the value of farm property owned by the farmers. Farmers on large crop farms had the heaviest debt load; their debts were 103 percent of the value of farm property. The situation on the crop farms is more serious than the data indicates because a large portion of the farm property consists of machinery which depreciates rapidly while livestock on the livestock farms will probably become more valuable.

Families on large farms earned considerably larger incomes in 1940 than families on small farms. Family farm earnings per acre of cropland were slightly larger on small livestock farms than on small crop farms, but families on small livestock farms earned only $179 of non-farm income. The largest average family farm earnings, $995, were on large livestock farms. However, $43 of the family farm earnings per farm on large livestock farms was caused by increases in inventory values of real estate. By correcting the family farm earnings for the increase in real estate values and adding the $234 non-farm income, total farm earnings were found to be $1186 on large livestock farms, compared to $1191 on large crop farms. The type of farm appeared to have little effect on incomes in 1940, but large differences in incomes were caused by differences in size of farms.

Table 8. - Measures of Farm Organization and Efficiency of Operation by Size and Type of Farms, 1940, Area 2.

Efficiency and Organization Factors		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
		(dol.)	(dol.)	(dol.)	(dol.)	(dol.)
Investment in power per acre of crop land, Jan. 1	1/	1.00	.73	.86	.51	.80
Investment in machinery per acre of crop land, Jan. 1	2/	.84	.70	.69	.69	.73
Tractor and truck expense per acre of crop land	3/	.51	.60	.42	.43	.47
All machinery expense per acre of crop land	4/	1.02	1.17	.78	.82	.90
Total farm expense per $100 gross farm income	5/	58.14	63.05	53.25	64.02	58.13
Livestock expense per livestock unit	6/	11.80	18.91	10.43	16.98	12.32
Debts per $100 farm property Jan. 1		93.35	94.69	84.50	102.99	91.57
Family farm earnings per farm	7/	556.	568.	995.	847.	743.
Non-farm income per farm		179.	258.	234.	344.	236.
Family farm earnings per acre of crop land		2.18	2.01	2.17	1.63	2.04

1/ The investment in power is the beginning inventory of tractors and work-stock.

2/ Value of tractor, truck and automobile not included.

3/ Expenses do not include depreciation.

4/ Tractor, truck and automobile expense included, depreciation not included.

5/ Total farm expense includes current farm cash expenses, capital goods purchased, and decrease in the inventory of farm property. Gross farm income includes cash farm receipts, increase in the inventory of farm property, and family living furnished by the farm.

6/ Livestock units are calculated from the beginning inventory of work-stock, dairy cows, sows, sheep, and hens. Livestock expense includes feed purchased and other livestock expense exclusive of livestock purchased or change in livestock inventory.

7/ Family farm earnings are the cash farm receipts, increase in farm inventory, and the value of home produced foods; less current farm cash expenses, capital goods purchased, decrease in farm inventory, and five percent interest on operators equity of farm property as of January 1, 1940.

PLANNED AND ACTUAL CASH EXPENDITURES FOR FAMILY LIVING
(Table 9 discussed)

Actual expenditures for family living, with the exceptions of food, life insurance, and other expenditures, were below the amounts planned. The small families spent $16 less than planned, and the large families $23 less than planned. It is obvious that if these families had placed greater emphasis on home production of foods the food bill of the families could have been in amounts not in excess of that set up in the plans and possibly been less which would have represented a considerable saving. Where planned expenditures were in excess of actual expenditures, the amounts ranged from $3 to $17. The items showing the greatest differences in this group were clothing and household operation. Inasmuch as planned expenditures were in excess of actual expenditures among most of the items, the question arises as to what may have been the primary purposes in the planning program.

The average size of the small families was 3.4 persons and that of the large families 6.9 persons or twice the size of the former. Total family living expenditures made by large families were only 31 percent greater than those made by small families. Expenditures for food were 33 percent greater and the total value of food consumed was 35 percent greater than that of the small families.

The following summarizes briefly planning and purchases and production of foods for the table by the families in this study. Values of foods produced 1/ by the families reporting have been interpolated with the cash purchases of foods of all of the families.

	Small families		Large families		All families	
	Planned	Actual	Planned	Actual	Planned	Actual
Total value of						
Food consumed	$375	$348	$534	$469	$459	$411
Home produced	263	206	369	280	319	245
Purchased	112	142	165	189	140	166

To a considerable extent the lack of production of foods from the farm was made up through cash purchases of foods in excess of the amounts of expenditure planned. Every effort should be made by the families to increase their home production of foods through use of windmill gardens, field gardens, and cold frames, and through greater use of livestock and livestock products.

Plans were for the small-family person to have $2.12 worth of food per week. Actually he consumed $1.97 worth. It was planned that the large-family person would have $1.49 worth of food per week. He consumed $1.31 worth. When consumption of food was computed on an adult male equivalent 2/ basis, the small-family adult male consumed food valued at $2.48 and the large-family adult male consumed food valued at $1.80, or a difference of $0.68 per week.

1/ The farm value of home-produced food was used here.
2/ See Appendix, table 1, adult male equivalent scale used to weigh food consumption of family members.

Table 9. PLANNED AND ACTUAL EXPENDITURES FOR ITEMS OF FAMILY LIVING, BY SIZE OF FAMILY, 1940, AREA 2 1/

Items	Small families 2/			Large families 2/			All families 2/		
	Planned	Actual	Difference	Planned	Actual	Difference	Planned	Actual	Difference
Food	$112	$142	$ +30	$165	$189	$ +24	$140	$166	$ +26
Clothing	64	50	-14	96	79	-17	81	65	-16
Personal	19	12	- 7	19	16	- 3	19	15	- 4
Medical	40	32	- 8	45	39	- 6	43	36	- 7
Household operation	63	48	-15	69	58	-11	66	53	-13
Minor housing	7	4	- 3	9	3	- 6	8	4	- 4
Minor furnishings & equipment	13	10	- 3	16	13	- 3	14	11	- 3
School, church, gifts, recrea.	27	24	- 3	37	31	- 6	32	28	- 4
Life insurance	6	7	+ 1	8	8	-	7	7	-
Other	4	10	+ 6	3	8	+ 5	3	9	+ 6
Total	355	339	-16	467	444	-23	413	394	-19

1/ Small families: those having less than five members.
Large families: those having five or more members.
2/ Total families, 219; small families, 105; large families, 114.
Average size of all families, 5.2; small families, 3.4; large families, 6.9
Average adult male equivalent of all families, 3.9; small families, 2.7; large families, 5.0.

PLANNING PERFORMANCE
(Table 10 discussed)

One-third of the families underplanned or overplanned their expenditures in amounts in excess of $100. Eleven families underplanned their expenditures in excess of $200 and eight families overplanned in excess of this amount. The averages of the amounts in which the families underplanned or overplanned were approximately the same. In case of the former, it was $95 and the latter $92.

With the exception of those families whose expenditures were in excess of $100 over or under the plan, the families were distributed fairly evenly among the amount groups of less than $100 over or under the planned expenditures.

A total of 85 families underplanned and 134 families overplanned the amount of their actual expenditures for family living. Inasmuch as the families did not spend as much for most of the items of family living as indicated in the previous section, it would appear that, with greater emphasis on home-produced foods and therefore a reduction in cash purchase of foods, a considerable reduction could be made in the planned expenditures for family living. This is on the assumption that the planned expenditures for most of the items, with the exception of food, had been placed too high. It is realized that a number of factors may have accounted for this situation or that it was hoped that certain objectives relative to level of living would be attained. Also incident to this may be the fact that record books kept during previous years were not referred to closely enough at the time that the 1940 farm and home plans were made.

Table 10. - ANALYSIS HOME PLANNING, BY SIZE OF FAMILY, 1940, AREA 2 1/

Amount	No. of small families		No. of large families		No. of families	
	Under planned	Over planned	Under planned	Over planned	Under planning	Over planned
$ 1-25	10	9	8	7	18	16
26-50	4	10	6	17	10	27
51-75	9	11	5	16	14	27
76-100	6	11	6	7	12	18
101 & over	15	20	16	26	31	46
Total	44	61	41	73	85	134
Average amount	$82	$87	$109	$96	$95	$92

1/ Small families: those having less than five members.
Large families: those having five or more members.

MONTHLY DISTRIBUTION OF EXPENDITURES
(Table 11 discussed)

Neither various months nor seasons were equal in their demands for the expenditure of resources for family living. Family living expenditures for the small families were the least ($24) in April and the highest($33) in December. Among the large families the least ($31) was spent in February and the most ($44) in December. These differences represent over a third increase in expenditures from the low month to the high month.

With greater receipts from farm products being realized through the summer and in the fall of the year, with the beginning of school, with the need for replenishing the clothing supply, and with the advent of the holiday season, the trend of family living expenditures was toward a definite increase. However, with the beginning of the winter season in January and with decreased farm receipts, a precipitous drop is noted. Similar studies for other areas in this region have consistently shown the same trend.

Farms having several sources from which receipts are realized tend to have available a steadier income throughout the year. It is highly desirable to have such an income from the standpoint of family living, otherwise there is a tendency to reduce these expenditures during that part of the year when proper and adequate foods and other essentials are most needed.

Expenditures during the summer months, when subsistence was available from the garden and when expenditures largely peculiar to the other seasons of the year were at a minimum, did not tend to decrease.

Table 11. - MONTHLY DISTRIBUTION OF FAMILY LIVING EXPENDITURES, BY SIZE OF FAMILY, AREA 2, 1940 1/

Month	Small families (Amount)	Large families (Amount)	All families (Amount)
January	$28	$37	$33
February	25	31	28
March	26	32	29
April	24	35	30
May	30	40	35
June	29	35	32
July	29	34	32
August	30	43	37
September	28	41	35
October	27	33	30
November	30	39	35
December	33	44	38
Total	339	444	394

1/ Small families: those having less than five members.
Large families: those having five or more members.

HOME PRODUCED FOODS
(Table 12 discussed)

Ninety four per cent of the total value of foods produced from the farm by the small families and ninety two per cent of that produced by the large families came from livestock and livestock products, the balance from gardens and orchards. Dry weather and insect infestation affected to some extent late garden production and fruit crops. It was planned that the small families would obtain ninety two per cent of the total value of home-produced foods from livestock and livestock products items. The large families were expected to obtain ninety one per cent from these sources. The planned production of foods by the small families was $263. Actually, they produced $206 worth. For the large families these figures were $369 and $280. The small families consumed more eggs than planned. The large families consumed mutton, potatoes, and meal in quantities only slightly above those planned. The production and consumption of other items from the farm were all below the planned performance. As pointed out in the section on cash expenditures for food, some of these deficits were made up through cash purchase of food in excess of that planned.

The total value of food purchased and produced[1/] by the small families was $348. Fifty nine per cent of this was home produced. That purchased and produced by the large families was valued at $469. Sixty per cent of this was home produced. These percentages are still considerably below the home production "benchmark" (75 per cent of the total value of food consumed) being recommended by the Farm Security Administration. If it had been necessary for the small families to purchase all of the food which they consumed the cost would have been $432 and to the large families the cost would have been $582.

Production of foods from the farm for table use cannot be emphasized too strongly. Livestock and livestock products items supplemented by a plentiful supply of fruits and vegetables will go far toward assisting the families to become self-sustaining. It will enable the use of certain resources for satisfactions other than biological necessities.

1/ The farm value of home produced foods is used here.

Table 12. - SUMMARY OF HOME-PRODUCED FOODS PLANNED AND USED BY THE FAMILY, BY SIZE OF FAMILY, 1940
AREA 2 1/

Item	Unit	Small families 2/ Planned	Small families 2/ Used	Small families 2/ Farm value	Small families 2/ Retail value	Large families 2/ Planned	Large families 2/ Used	Large families 2/ Farm value	Large families 2/ Retail value	All families 2/ Planned	All families 2/ Used	All families 2/ Farm value	All families 2/ Retail value
Milk	gal.	321	306	$73	$98	463	396	$95	$127	396	353	$85	$113
Cheese	lb.	27	20	2	3	55	39	4	6	42	30	3	5
Butter	lb.	76	58	15	18	125	85	21	26	102	72	18	22
Cream	gal.	45	27	33	49	54	35	42	63	50	31	37	56
Lard, fat pork, bacon	lb.	117	89	10	13	155	132	15	20	137	112	12	17
Lean pork	lb.	177	149	18	27	268	244	29	44	225	199	24	36
Beef, veal	lb.	128	58	8	13	155	62	9	14	142	61	9	13
Mutton, lamb	lb.	0	1	0	0	2	5	1	1	1	3	0	1
Fish, game	lb.	3	3	0	1	7	2	0	0	5	2	0	0
Poultry	lb.	140	129	18	23	183	146	20	26	162	138	19	25
Eggs	doz.	122	131	17	20	202	172	22	26	164	152	20	23
Dried beans and nuts	lb.	16	11	1	1	24	11	1	1	20	11	1	1
Tomatoes	lb.	156	117	2	5	251	186	4	7	206	153	3	6
Leafy g & y vegetables	lb.	202	96	3	6	378	161	5	10	294	130	4	8
Other vegetables	lb.	223	151	3	8	347	244	5	12	288	200	4	10
Fruit	lb.	41	21	0	1	85	81	2	3	64	52	1	2
Potatoes	lb.	129	84	2	2	167	174	3	3	149	131	3	3
Sweet potatoes	lb.	68	35	1	1	68	19	0	1	68	27	1	1
Flour	lb.	37	6	0	0	60	62	1	2	49	35	0	1
Cereal	lb.	10	2	0	0	19	5	0	0	15	4	0	0
Corn meal	lb.	1	1	0	0	0	2	0	0	0	2	0	0
Syrup, sorghum & honey	qt.	22	4	0	1	6	6	1	1	14	5	1	1
Total	xx	xx	xx	206 3/	290	xx	xx	280 3/	393	xx	xx	245 3/	344

1/ Small families: those having less than five members; large families: those having five or more members.
2/ Total families reporting, 206; small families, 98; large families, 108.
3/ Farm value of home-produced foods planned by all families, $319; small families, $263; large families, $369.

CONSERVED FOODS
(Table 13 discussed)

An average of 101 quarts of fruits, vegetables, and meats was carried over from the previous year by each of the families. The small families carried over 86 quarts and the large families 112 quarts. It is apparent from the data that neither the large nor the small families were too well stocked with a carry-over of conserved foodstuffs. from the previous year (1939). Part of this may be attributed to the fact that 1939 was a very dry year and unfavorable to fruit and vegetable production. This quantity of carry-over was sufficient to provide only 0.6 of a quart of conserved foodstuff per day until the next fresh fruit and vegetable season which began in June. Unless this was supplemented by a considerable quantity of dried and stored foodstuffs, it could not have been considered adequate to provision the families with a well-balanced diet, and particularly so during that time of the year when family living expenditures, including those for food, were being kept at a minimum. Since the Farm Security Administration is emphasizing the importance of carrying over a quantity of foodstuffs sufficient for a full year's needs beyond the next fresh fruit and vegetable season so as to compensate for any deficiencies that might occur due to drouth or other adverse conditions, it follows that both planned and actual conservation of foods figures need to be increased.

During 1939, 53 F.S.A. client families in Kansas who made reportings, conserved an average of 247 quarts of fruits, vegetables, and meats. The families in this study conserved an average of 274 quarts, which is a slight improvement over the performance of the families studied during the previous year.

Both the large and the small families fell below their planned conservation of tomatoes, vegetables, fruits, and meats. On the other hand, these families exceeded their planned performance in the conserving of jams, jellies, pickles, and kraut, as well as in the preservation of meats through the smoking and salting processes.

Table 13. - SUMMARY OF CANNING ACTIVITY, BY SIZE OF FAMILY, 1940, AREA 2 1/

Item	Unit	Small families 2/			Large families 2/			All families 2/		
		On hand: begin'	Planned to: conserve	Conserved during yr.	On hand: begin'	Planned to: conserve	Conserved during yr.	On hand: begin'	Planned to: conserve	Conserved during yr.
Canned:										
Tomatoes	qt.	11	44	29	17	73	43	14	59	37
Vegetables	qt.	17	64	47	17	95	64	17	81	56
Fruit	qt.	40	92	81	53	143	113	47	119	98
Fruit juice	qt.	3	1	7	2	2	6	3	2	6
Meat	qt.	8	33	28	15	40	24	12	37	26
Jams & jellies	qt.	1	2	10	3	2	16	2	2	13
Pickles	qt.	5	9	27	3	7	35	4	8	31
Kraut	qt.	1	2	4	2	5	10	2	4	7
Total	qt.	86	247	233	112	367	311	101	312	274
Smoked and salted meat	lb.	22	27	107	24	20	142	23	24	126

1/ Small families: those having less than five members.
Large families: those having five or more members.
2/ Total families reporting, 207; small families, 98; large families, 109.

HOUSEHOLD INVENTORY
(Table 14 discussed)

There was practically no difference between the value of the household inventory of the small families and that of the large families. That of the former was valued at $250 and of the latter at $251. Clothing possessed by the small and the large families was valued at $36 and $44, respectively. The large families showed a slightly greater frequency among the bed and bedding items and among chest of drawers, straight chair, sewing machine, and pressure cooker items than did the small families. The small families had more easy rockers, radios, floor coverings, and refrigerators than did the large families.

For the most part, the families seemed to have adequate furnishings and equipment to take care of their needs; however, it is quite certain that the large families will have to make replacements sooner than the small families. Three out of five families reported radios; one out of three, refrigerators; nine out of ten, sewing machines; and one out of two, pressure cookers.

Inasmuch as practically all of the families have sewing machines, it is apparent that many women are supplementing clothing purchases with home-made items of clothing. Even though only one-half of the families have reported pressure cookers, it is highly probable that more than that proportion use them; but it would seem to be good economy for each of the families to possess a cooker, thus enabling them to conserve foodstuffs in the best approved manner and with the least risk of spoilage.

Table 14. - INVENTORY OF HOUSEHOLD ITEMS, BY SIZE OF FAMILY, 1940
AREA 2 1/

Item	Small families 2/	Large families 2/	All families 2/
Single beds	.3	.3	.3
Double beds	2.0	3.0	2.5
Single mattresses	.2	.2	.2
Double mattresses	2.0	3.0	2.3
Blankets, etc.	3.0	3.5	3.0
Comforts & quilts	7.2	8.2	7.7
Davenport or couch	.5	.5	.5
Chest of drawers	1.4	1.6	1.5
Straight chairs	6.1	6.6	6.3
Easy rockers	1.4	1.3	1.4
Dining tables	1.0	1.0	1.0
Other tables	1.0	1.0	1.0
Cupboards	1.1	1.1	1.1
Radios	.6	.5	.6
Rugs	.5	.3	.4
Linoleums	1.5	1.3	1.4
Refrigerators	.4	.3	.3
Sewing machines	.8	.9	.9
Pressure cookers	.4	.5	.5
Jars	152.	174.	163.
Value of clothing	$36	$44	$40
Value of household inventory	$250	$251	$250

1/ Small families: those having less than five members.
Large families: those having five or more members.
2/ Total families reporting, 207; small families, 99; large families, 108.

APPENDIX

Table 1.- CONSUMPTION UNIT SCALE

Age in years	Child	Weights in Terms of Adult Male Boy or Man	Girl or Woman
1.	.4		
2.	.5		
3.	.55		
4.	.6		
5.	.65		
6.	.75		
7.	.75		
8.	.8		
9.	.8		
10.	.85		
11.		.95	.85
12.		.95	.95
13.		1.0	1.0
14.		1.0	.95
15.		1.05	.9
16.		1.15	.85
17.		1.1	.85
18 to 59		1.0	.95
60 and over		1.0	.9

Adopted from scale of weighing food consumption published by E. L. Kirkpatrick, Rosalind Tough, and May Cowles, in "How Farm Families Meet the Emergency", Wisconsin Agricultural Experiment Bulletin 126.

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UNITED STATES DEPARTMENT OF AGRICULTURE

FARM SECURITY ADMINISTRATION

in cooperation with

BUREAU OF AGRICULTURAL ECONOMICS

Analysis of 50 FSA Farm and Home Record Books in the Eastern Part of New Mexico, 1940

Counties

Chaves	Lea
Colfax	Mora
Curry	Quay
De Baca	Roosevelt
Eddy	San Miguel
Guadalupe	Union
Harding	

October, 1941

ANALYSIS OF FARM FAMILY RECORD BOOKS FOR AREA 4, 1940

The Farm Security Administration, Region 12, and the Division of Farm Management and Costs and the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics, cooperated in the analysis of Farm Family Record Books kept by FSA clients in 1940. Due credit should be given to the farmers who kept these record books and the county FSA personnel who gave the farmers assistance and sent these books to the regional office. All preliminary tabulations and summations from these books were made by Work Projects Administration under Official Project No. 65-2-66-622.

Region 12 of the FSA was divided into six areas, principally on the basis of types of farming. Wherever possible, FSA district boundaries were followed in order that the results of the study would be directly useful to FSA district supervisors. In some cases, two or more districts are combined into one area.

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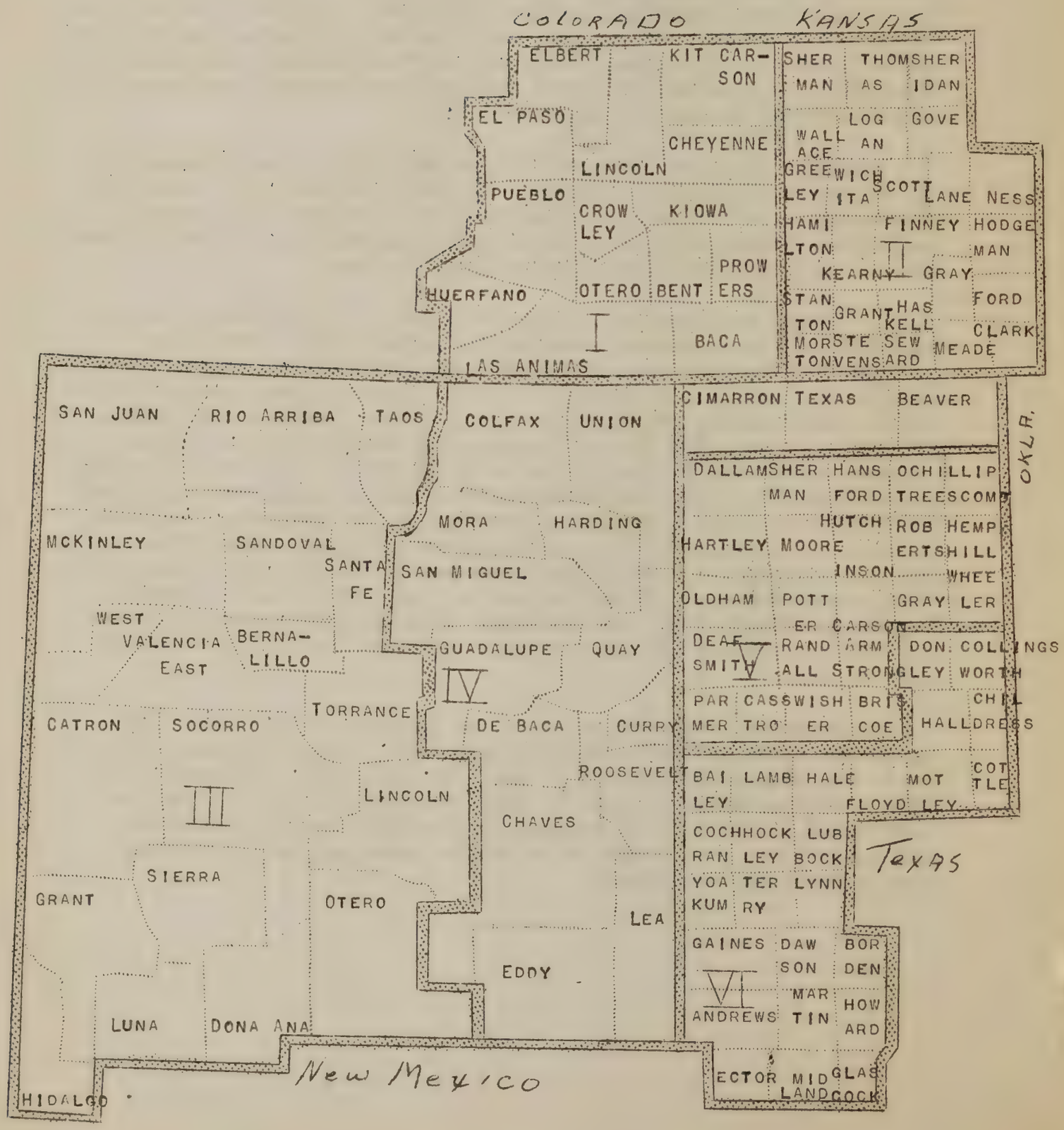
To make the results of these analyses of the greatest use in planning to Farm Security Administration personnel, farms were grouped by size and type of farm and size of family. Size of farm groups were determined within each area, placing about one-half as small farms and the other half as large farms. Only two classifications were made for type of farms--crop and livestock. The type of farm classification was based on the farmer's sales and inventory reportings and on the 1940 farm plans. Size of family is reflected in the planning and consumption behavior of the families, the proportionate expenditures for various items of family living, the amount and kinds of subsistence produced on the farm, the extent of their conservation of foods program and some indication of their household inventories. On the basis of family size, two groupings were made--families of less than five persons and those of five or more persons.

According to an FSA report dated June 24, 1941, there were 1,959 Farm Family Record Books in this area. Only 110 were sent in to the regional office to be used in this study. Of these, 50 were complete enough for use in this report. Tables are presented with brief explanatory statements that should furnish assistance and guidance to county and district FSA personnel in the working out of farm and home plans.

ANALYSIS OF FSA RECORDS BY AREAS FOR REGION XII



SUMMARY AND RECOMMENDATIONS

1. The productive efficiency for crops and livestock must be increased if many of these farmers meet their financial obligations and become permanently rehabilitated. Records of physical production of crops and livestock were too meager for conclusions but actual crop sales were only 57 percent of the planned indicating low crop yields. Dairy products sold averaged $29.64 per dairy cow. Assuming the average price of butterfat sold to be 25¢ per pound farmers sold 119 pounds per cow making a total of 133 pounds per cow when the butterfat used in the home was included. Eggs sold averaged 50 cents per hen. Assuming the average price of eggs sold to be 19 cents per dozen farmers sold 32 eggs per hen making a total of 51 eggs per hen when eggs used in the home were included.

2. There is need for improvement in plans as is shown by comparing actual and planned results. With actual crop sales only 57 percent of the planned it appears that crop sales were greatly over estimated in the plan, or crop yields were complete failures in some cases and should have made possible some savings in cash machinery costs. However, tractor costs were 30 percent more than planned. Automobile expense was 81 percent greater than planned. With incomes lower than planned one would not expect purchases of capital goods to exceed the plans since farmers would not have capital of their own to invest. But actually purchases of capital goods were 29 percent more than planned showing that needs were not carefully investigated when the plans were made. Record books kept on the farm in previous years should be consulted when making the farm plan.

3. A comparison of crop and livestock farms showed that receipts and farm and home expenses were more uniform through-out the year on the livestock farms. However, average incomes for the entire year were not as favorable for livestock farms as for crop farms. Actual crop sales on livestock farms were about one-third the amount planned compared to actual crop sales of approximately two-thirds the planned on crop farms.

4. The group of families on small crop farms averaging 127 acres in size with 90 acres of cropland and 32 acres of permanent pasture were found to have family farm earnings, non-farm incomes, and increases in net worth that were equal or superior to those for families on large farms. It is probable that other small unsuccessful farming units can be organized similar to these small crop farms and become successful units without obtaining additional land.

5. Sixty percent of the families increased their net worth during 1940 indicating they are making progress towards becoming rehabilitated. Fifty-two percent of all farms increased their indebtedness and 62 percent increased assets. Loans should be increased or liquidated depending on the amount and type of land, machinery, livestock, labor, and management available on each farm. The managerial abilities of individual farm operators are most important to a correct determination of needs for loans. More complete farm

record books giving the physical production for crops and livestock are needed to determine the abilities of farm operators to manage various sizes and types of enterprises and show where loans should be increased or liquidated.

6. In order that cash expenditures for food be kept at a minimum, it is apparent that the families will need to put more effort into producing larger quantities of food from the farm. Cash expenditures for food were $44 in excess of those set up in the home plans, whereas the total expenditure for all items of family living including food was only $50 above the amount planned. The large families were twice as large as the small families but spent only one-fourth more for all items of family living. A large portion of this difference was made up through small per capita expenditures for food; however, this was not supplemented by greater per capita use of home-produced foods.

7. Under planning of family living occurred over twice as frequently and in greater amounts than did over planning. Under planning averaged $89. Over planning averaged $51.

8. Family living expenditures tended to increase toward the end of the year. Part of this was due to fall and winter needs plus education and holiday expenses. Too, at this time of the year, greater resources were available inasmuch as most of the crop and livestock income was realized during this period. Twenty-six percent of the small families year's outlay for family living was made in the fall. The large families spent 29 percent.

9. The small families produced only 66 percent of the total value of planned production of foods for the table. A large part of this lack of production may be attributed to the small quantity of milk used by the small families; however, at the same time they reported an average of 5 dairy cows each. The large families reported 6 cows each. Too, the small families did not report consuming a very large quantity of meat.

10. Neither the large or the small families conserved the quantity of foodstuffs planned. Both sized families fell below their plans in the conservation of tomatoes, vegetables, and fruit. The quantity of foodstuffs carried over from the previous year can hardly be considered as sufficient to provision the families until the next fresh fruit and vegetable season unless supplemented by a large quantity of dried and stored products.

11. The families seemed to have adequate furnishings and equipment to take care of their needs; however, it is apparent that the large families are in need of more chairs and floor coverings for their homes. There seems to be a definite lack of refrigerators in this area.

SIZE OF FARMS AND FAMILIES, INVENTORIES OF FEED AND LIVESTOCK
(Table 1 discussed)

Farms with 300 acres or more were classified as large farms. Large livestock farms had 27 acres of permanent pasture for each livestock unit of grazing livestock consisting of work-stock, cows, and sheep. Other groups of farms had less pasture than large livestock farms. There was an average of 19 acres of pasture per livestock unit for large crop farms, 7 acres for small livestock farms, and 9 acres for small crop farms. The present size of livestock enterprises on small farms require the use of temporary pasture and supplement feeds.

Both the beginning and ending inventories showed more grain on hand for crop farms than for livestock farms. For each livestock unit of work-stock, cows, and sheep there were 1.4 tons of roughage on the small livestock farms January 1, 1940, 2.6 tons on small crop farms, 1.2 tons on large livestock farms, and 4.2 tons on large crop farms. The supply of roughage was considerably less one year later on small livestock and large crop farms; about the same on large livestock farms, and more on small crop farms. Considering available pasture, grain, and roughage together there was a severe shortage of livestock feed on small livestock farms. The production of feed needs to be increased on small livestock farms before their livestock enterprises will be successful. The families on the small crop farms had less cropland, pasture, and livestock in 1940 but their family farm earnings (Table 8) were $394 more than for the families on the small livestock farms.

Livestock on the farms in area 4 consisted mostly of dairy cattle. Families on small crop farms had little more than enough livestock for their own subsistence purposes. Families on large crop farms were rapidly expanding their dairy enterprises as was shown by an average increase of three dairy cows per farm during the year. Sheep were on three of the large livestock farms.

Table 1. Acres of land, size of families, and inventories of feed and livestock for farms by size and type in Area 4, 1940.

Item	Unit	Average per Farm				
		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Number of farms	No.	6	15	20	9	50
Cropland	Acre	132	90	232	286	187
Permanent Pasture	Acre	56	32	433	140	215
Total land in farms	Acre	195	127	677	441	412
Persons in the family	No.	4.5	5.4	4.5	6.0	5.0
Adult males 16 yrs. or more	No.	1.3	1.4	1.2	1.2	1.3
Grain						
January 1	Bu.	36	70	39	162	70
December 31	Bu.	49	58	15	65	41
Roughage						
January 1	Ton	12	9	22	31	19
December 31	Ton	8	14	23	15	17
Workstock						
January 1	No.	2.2	1.7	4.3	2.7	3.0
January 1	Dol	66	103	217	153	153
Dairy Cows						
January 1	No.	6.5	1.7	8.0	4.3	5.3
December 31	No.	6.0	2.5	8.0	7.4	6.0
Beef Cows						
January 1	No.	0.0	0.1	0.7	0.4	0.4
December 31	No.	0.0	0.1	0.2	0.0	0.1
Sows						
January 1	No.	1.5	0.7	1.2	1.3	1.1
Sheep						
January 1	No.	0.0	0.0	20.2	0.0	8.1
Hens						
January 1	No.	87	57	89	47	72
Productive Livestock Units 1/						
January 1		7.3	2.5	12.6	5.4	7.7

1/ Productive livestock units were calculated from the beginning inventory of dairy cows, beef cows, sheep, sows, and hens.

INVENTORIES OF FARM AND HOME PROPERTY AND INDEBTEDNESS
(Table 2 discussed)

About one-third of the 50 farmers were using tractors. Tractors were most common on large crop farms where they were being used on 78 percent of the farms by the end of the year.

Small crop farms had the fewest acres of land of any group but the largest investment in other machinery. For all groups of farms the average value of automobiles was $189 in the ending inventory and the average value of tractors was $532.

Twenty two of the farmers held title to part or all of the land they operated and eight of these reported no indebtedness on the land. The average value of the real estate owned by the operators was $11.33 per acre at the beginning of the year and $11.42 at the end of the year.

The total value of farm inventories decreased $39 per farm during the year for small livestock farms, but increased on other groups of farms. All types of farm property on small livestock farms decreased except for small increases in the value of automobiles or trucks and feed and supplies. An increase of $423 per farm on large crop farms was the largest farm inventory increase of any group. Most of the increase on the large crop farms resulted from increases in tractors, automobiles, and other machinery; livestock increased $79 and feed and supplies decreased $13. The average increase in livestock for all groups of farms was only $19 per farm. Increases in farm machinery may be desirable, but to maintain good farm balance it is likely that on many farms there should be larger increases in livestock and perhaps less outlay for machinery.

There was little change in household inventory or cash, savings, and accounts due. Indebtedness to FSA increased an average of $130 per farm for all groups, but total indebtedness increased only $97, indicating that $33 per farm of the money borrowed from FSA was used to pay off debts to other agencies or persons. FSA supervisors should assist their clients in arriving at satisfactory debt payment programs with all creditors.

Total indebtedness decreased $31 per farm on large livestock farms during 1940 compared to an increase of $403 for large crop farms. The increase in total indebtedness on large crop farms was equal to 95 percent of the increase in farm inventory.

Table 2. Inventories of Farm Property, Household Property, and Indebtedness for Families Grouped According to the Size and Type of their Farms, Area 4, 1940

Item		Unit	Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Farms		No.	6	15	20	9	50
Tractors	Jan. 1	No.	0.3	0.3	0.2	0.4	0.3
	Jan. 1	Dol	142	177	92	197	142
	Dec. 31	No.	0.3	0.3	0.3	0.8	0.4
	Dec. 31	Dol	112	199	165	409	213
Autos or trucks	Jan. 1	No.	1.0	0.9	0.8	0.8	0.9
	Jan. 1	Dol	180	141	126	131	138
	Dec. 31	No.	1.0	0.8	1.0	0.8	0.9
	Dec. 31	Dol	199	158	124	195	156
Other Machinery	Jan. 1	Dol	136	193	181	126	170
	Dec. 31	Dol	130	223	203	193	198
Livestock	Jan. 1	Dol	495	289	978	205	574
	Dec. 31	Dol	462	350	953	284	593
Feed & supplies	Jan. 1	Dol	149	248	197	630	284
	Dec. 31	Dol	160	311	208	617	306
Real Estate Owned	Jan. 1	Acre	62	51	187	44	105
	Jan. 1	Dol	900	1285	1475	589	1190
	Dec. 31	Acre	62	51	187	44	105
	Dec. 31	Dol	900	1309	1474	603	1199
Total Farm Inventory	Jan. 1	Dol	2002	2333	3049	1878	2498
	Dec. 31	Dol	1963	2550	3127	2301	2665
Household Inventory	Jan. 1	Dol	292	310	320	254	302
	Dec. 31	Dol	290	348	327	246	314
Cash, Savings and Accounts due	Jan. 1	Dol	16	96	67	154	85
	Dec. 31	Dol	9	66	70	199	86
Total assets 1/	Jan. 1	Dol	2310	2739	3436	2286	2885
	Dec. 31	Dol	2262	2964	3524	2746	3065
Indebtedness to FSA	Jan. 1	Dol	404	379	743	475	545
	Dec. 31	Dol	491	588	749	777	675
Total Indebtedness 2/	Jan. 1	Dol	1046	876	1679	874	1217
	Dec. 31	Dol	1106	975	1648	1277	1314

1/ Includes value of real estate owned by the operators
2/ Includes mortgages on real estate owned by the farm operators.

CASH RECEIPTS AND EXPENSES, ALL FARMS
(Table 3 discussed)

Total actual cash farm receipts were $974 which was $341 less than planned. Forty-five percent of the planned farm receipts were to be from crops, but crop sales were $254 less than planned, and amounted to only 35 percent of the actual farm receipts. The exact reasons for the large discrepancy between actual and planned crop sales could not be readily determined because only 17 farmers reported crop production and these farmers apparently reported yields per harvested acreages when planned yields were based on acres planted.

For the 17 available crop production records, the average planned wheat yield was 9.3 bushels, actual 7.4 bushels; planned grain sorghum yield 10.5 bushels, actual 8.0 bushels; planned forage sorghum yield 0.4 ton, actual 0.2 ton; planned bean yield 4.4 cwt., actual 0.7 cwt. With crop production the foundation for farm income, either directly by crop sales or indirectly through livestock, more attention should be given to facts about crop yields. A record showing the net income from a farm is of little value in analyzing the farm business unless it is complete enough to show specific causes for the size of the income.

Actual egg receipts were 50 cents per hen. Egg production for nine farms reporting averaged 95 eggs per hen. Eight farmers reporting on chicks raised had lost 45 percent before the chicks were two months old. Dairy products sold averaged $29.64 per dairy cow. The average butterfat production for seven farms reporting this information was 227 pounds per cow. Hog receipts were $44 per farm, or $40 per sow on hand at the beginning of the year. Records from six farmers showing pigs produced gave an average of seven pigs per litter. Too few of the farmers reported butterfat per cow, pigs per litter, eggs per hen, or chicks raised to give reliable estimates of average production for all the farms.

Actual current farm cash expenses were only $5 more than planned, but there were large discrepancies between the actual and the planned for some individual expense items. For example, actual automobile expense was 81 percent more than planned. The average actual automobile expense of $76 per farm does not appear excessive when the automobile was used for both business and pleasure purposes. Actual current farm cash expenses were $527 per farm and averaged $2.82 per acre of cropland.

Cash net farm income, which is the difference between cash farm receipts and current cash farm expense was $447. This was $346 less than planned, but $85 more than the family living expenditures. The families secured additional cash from loans and nonfarm income, which included work off the farm and grants in those cases where grants were made. They also had other cash expenditures including the purchase of capital goods and payment of debts. The actual total cash expended for all purposes including family living was $1578 per family; $13 in excess of the total cash received during the year.

Table 3 A comparison of the actual and planned receipts and expenses for 50 farms in Area 4, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference	Actual
			Dollars 1/	Pct. of planned 2/
Receipts				
Crops	339	593	- 254	57
Poultry	15	24	- 9	62
Eggs	36	73	- 37	49
Dairy products	166	196	- 30	85
Cattle	117	115	+ 2	102
Hogs	44	84	- 40	52
Other livestock	25	65	- 40	38
Other (farm)	126	20	+ 106	630
AAA payments	106	145	- 39	73
Cash farm receipts	974	1315	- 341	74
Other income	167	73	+ 94	229
Money borrowed	450	312	+ 138	144
Total cash received	1591	1700	- 109	94
Home produced foods 3/	221	268	- 47	82
Total	1812	1968	- 156	92
Expenses				
Feed	93	92	+ 1	101
Crops	123	135	- 12	91
Automobile	76	42	+ 34	181
Tractor and truck	82	63	+ 19	130
Other machinery	26	50	- 24	52
Building and land	8	6	+ 2	133
Livestock	10	9	+ 1	111
Hired labor	44	45	- 1	98
Other (farm)	65	80	- 15	81
Current farm cash expense	527	522	+ 5	101
Capital Goods	281	218	+ 63	129
Debt payments	408	411	- 3	99
Family living expenditures	362	312	+ 50	116
Total cash expended	1578	1463	+ 115	108
Home produced foods 3/	221	268	- 47	82
Total	1799	1731	+ 68	104

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 33 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR SMALL LIVESTOCK FARMS
(Table 4 discussed)

The small livestock farms were the least successful of any of the groups as shown by the family farm earnings. However, the families on the small livestock farms earned $175 non-farm income which was more than that earned by families on either group of large farms, but less than the $283 earned by families on small crop farms. Families on small farms earned more non-farm income because a larger portion of their time was not needed by their small farm business as compared to families on large farms. Families on small crop farms earned more non-farm income than families on small livestock farms because the families on small crop farms had access to more farm machinery with which they did custom work for neighboring farmers.

Actual cash farm receipts for small livestock farms were $691 compared to $1177 planned. Most of this discrepancy between actual and planned cash farm receipts was caused by actual crop sales being 70 percent less than planned and dairy products 44 percent less than planned. Dairy products sold averaged $39.03 per dairy cow which was more than the products sold per cow from the other groups of farms. Assuming no change in the number of cows, it would have been necessary for farmers on the small livestock farms to sell $69.35 of dairy products per dairy cow to obtain the planned. Either plans were made for more dairy cows than farmers actually obtained, or unusually high production was planned. It does not appear that farmers purchased fewer dairy cattle than planned because actual expense for capital goods was 51 percent more than planned.

Current farm cash expense for small livestock farms was only two percent more than planned. However, there was considerable difference between the actual and the planned for some of the individual expense items. Expense for feed was 27 percent less than planned and crop expense 26 percent less than planned. Actual automobile expense was $76 per farm, but only $22 expense was planned. One family had no automobile, but another family had two automobiles. An annual planned expense of $22 per car is unreasonably low if the automobile is to be used as needed during the year. Cash net farm income was actually $390 compared to $793 planned. These families borrowed $52 per family more than planned and their payments on old debts were $177 less than planned.

Table 4 A comparison of the actual and planned receipts and expenses for 6 small livestock farms in Area 4, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference	Actual
			Dollars 1/	Pct. of planned 2/
Receipts				
Crops	106	347	- 241	30
Poultry	10	13	- 3	77
Eggs	51	128	- 77	40
Dairy products	242	430	- 188	56
Cattle	144	116	+ 28	124
Hogs	74	66	+ 8	112
Other livestock	12	10	+ 2	120
Other (farm)	32	26	+ 6	123
AAA payments	20	39	- 19	51
Cash farm receipts	691	1175	- 484	59
Other income	175	95	+ 80	184
Money borrowed	204	152	+ 52	134
Total cash received	1070	1422	- 352	75
Home produced foods 3/	146	308	- 162	47
Total	1216	1730	- 514	70
Expenses				
Feed	132	181	- 49	73
Crops	46	62	- 16	74
Automobile	76	22	+ 54	345
Tractor and truck	48	43	+ 5	112
Other machinery	18	13	+ 5	138
Building and land	22	6	+ 16	367
Livestock	3	7	- 4	43
Hired labor	20	16	+ 4	125
Other (farm)	25	32	- 7	78
Current farm cash expense	390	382	+ 8	102
Capital goods	177	117	+ 60	151
Debt payments	250	427	- 177	58
Family living expenditures	313	309	+ 4	101
Total cash expended	1130	1235	- 105	91
Home produced foods 3/	146	308	- 162	47
Total	1276	1543	- 267	83

1/ Actual minus the planned.
2/ Planned = 100 percent
3/ An average of 2 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR SMALL CROP FARMS
(Table 5 discussed)

The small crop farms were the smallest farms of any group, but the family farm earnings from the small crop farms lacked only $6 per farm of being as large as the family farm earnings of the most successful group; the large crop farms. Although the records did not contain complete information on crop yields it appears that the success of the families on small crop farms resulted from more satisfactory crop production than was obtained by other groups. Actual crop sales were 78 percent of the planned for small crop farms compared to only 30 percent for small livestock farms, 33 percent for large livestock farms, and 50 percent for large crop farms. Receipts from eggs averaged 53 cents per hen for small crop farms and dairy products sold averaged $18.57 per dairy cow. There were approximately two dairy cows per farm and a large portion of the dairy products were used for the home.

Actual cash expenses were more than planned for automobiles and tractors, less than planned for crops and feed, and approximately the same as planned for the other expense items. Total current farm cash expense was $39 per farm more than planned. Six of the 15 farms had less cash farm expense than planned, but in most cases their farm business was not successful in 1940 because the low expenses were accompanied by low crop sales. Total cash receipts from all sources including money borrowed were $107 per farm more than total cash expenses for all purposes. This increase of $107 in the cash balance was accomplished with borrowed money. Actual money borrowed was 71 percent more than planned. These facts indicate unsatisfactory planning and management of finances on the part of the supervisors and farmers.

Table 5 A comparison of the actual and planned receipts and expenses for 15 small crop farms in Area 4, 1940

Source of receipts or expenses	Average Per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	679	873	- 194	78
Poultry	11	22	- 11	50
Eggs	30	58	- 28	52
Dairy products	39	78	- 39	50
Cattle	26	41	- 15	63
Hogs	42	45	- 3	93
Other livestock	9	0	+ 9	--
Other (farm)	105	1	+ 104	--
AAA payments	120	157	- 37	76
Cash farm receipts	1061	1275	- 214	83
Other income	283	98	+ 185	289
Money borrowed	566	331	+ 235	171
Total cash received	1910	1704	+ 206	112
Home produced foods 3/	249	282	- 33	88
Total	2159	1986	+ 173	109
Expenses				
Feed	45	59	- 14	76
Crops	218	243	- 25	90
Automobile	59	32	+ 27	184
Tractor and truck	88	47	+ 41	187
Other machinery	22	17	+ 5	129
Building and land	3	4	- 1	75
Livestock	3	6	- 3	50
Hired labor	86	76	+ 10	113
Other (farm)	99	100	- 1	99
Current farm cash expense	623	584	+ 39	107
Capital goods	254	223	+ 31	114
Debt payments	513	516	- 3	99
Family living expenditures	403	326	+ 77	124
Total cash expended	1793	1649	+ 144	109
Home produced foods 3/	249	282	- 33	88
Total	2042	1931	+ 111	106

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 12 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR LARGE LIVESTOCK FARMS
(Table 6 discussed)

The family farm earnings for large livestock farms were less than for either group of crop farms. However, the families on the large livestock farms were the only group that decreased their indebtedness during the year. Also, their cash net farm income of $500 was the highest of any group.

As was the case with small livestock farms, the principal difficulty with the 1940 business was that crop receipts were far below the planned, indicating that crop production per acre was extremely low. Another possibility is that crop sales were lower than planned because a larger than planned portion of the crops produced were used for livestock feed. (This is another place where it is evident that complete crop production records are invaluable to an accurate analysis of a farm business). These farms probably had inefficient livestock production because egg sales averaged 43 cents per hen, the lowest of any group, and dairy products sold averaged $27.25 per dairy cow, the lowest of any group except small crop farms where dairying was little more than a subsistence enterprise. Cash farm receipts were $328 less than planned, but other income not from the farm and money borrowed was more than planned. As a result cash received from all sources amounted to only $167 less than planned.

Expense items were slightly more than planned except for other machinery, hired labor, and other farm expense. All current farm cash expense was $36 less than planned. Some of the discrepancy between the planned and the actual expense for individual expense items may have been caused by farmers entering some types of expense under a different column heading than that used for the same expense in the plan. Total cash expended during the year was one dollar per family more than total cash received from all sources.

Table 6 A comparison of the actual and planned receipts and expenses for 20 large livestock farms, Area 4, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	106	319	- 213	33
Poultry	25	33	- 8	76
Eggs	38	76	- 38	50
Dairy products	218	220	- 2	99
Cattle	220	197	+ 23	112
Hogs	40	128	- 88	31
Other livestock	46	150	- 104	31
Other (farm)	148	20	+ 128	740
AAA payments	127	153	- 26	83
Cash farm receipts	968	1296	- 328	75
Other income	125	57	+ 68	219
Money borrowed	302	209	+ 93	144
Total cash received	1395	1562	- 167	89
Home produced foods 3/	205	301	- 96	68
Total	1600	1863	- 263	86
Expenses				
Feed	134	107	+ 27	125
Crops	58	57	+ 1	102
Automobile	77	54	+ 23	142
Tractor and truck	64	56	+ 8	114
Other machinery	33	95	- 62	35
Building and land	7	6	+ 1	117
Livestock	13	11	+ 2	118
Hired labor	25	26	- 1	96
Other (farm)	57	92	- 35	62
Current farm cash expense	468	504	- 36	93
Capital goods	246	154	+ 92	160
Debt payments	340	345	- 5	98
Family living expenditures	342	300	+ 42	114
Total cash expended	1396	1303	+ 93	107
Home produced foods 3/	205	301	- 96	68
Total	1601	1604	- 3	100

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 14 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR LARGE CROP FARMS
(Table 7 discussed)

Family farm earnings of $583 per family for families on large crop farms were the largest of any group. However, the plans for these farms indicated considerably higher incomes than were actually received. Actual crop sales of $448 were only one-half the amount planned. Other farm receipts and dairy products were the only sources of farm income that were actually more than planned. Dairy products sold averaged $36.38 per dairy cow and eggs sold averaged 68 cents per hen. All cash farm receipts averaged $473 less than planned. Two of the nine farms had cash farm receipts that were approximately as large as planned. Cash farm receipts averaged $3.66 per acre of cropland compared to $11.79 for small crop farms, $4.17 for large livestock farms, and $5.23 for small livestock farms.

Large crop farms were the only group that produced more home foods than planned. However, planned production was unusually low and averaged only $129 per farm. Actual home produced foods were valued at $226 per farm.

Actual current farm cash expense was $586 per farm and six percent more than planned. Automobile and tractor expenses were the principal items that were more than planned. Planned automobile expense was $45 per farm, but actual expense was $104. Actual capital goods purchased were $476 per farm and approximately twice the amount purchased for other groups of farms. About three-fourths of the $476 was spent for machinery.

These farmers borrowed $750 per farm, the largest amount for any group. Money borrowed was $136 more than planned, but this was accompanied by debt payments that were $117 more than planned.

Table 7 A comparison of the actual and planned receipts and expenses for 9 large crop farms, Area 4, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	448	899	- 451	50
Poultry	4	17	- 13	24
Eggs	32	53	- 21	60
Dairy products	211	183	+ 28	115
Cattle	25	55	- 30	45
Hogs	36	65	- 29	55
Other livestock	15	20	- 5	75
Other (farm)	178	48	+ 130	371
AAA payments	97	179	- 82	54
Cash farm receipts	1046	1519	- 473	69
Other income	62	53	+ 9	117
Money borrowed	750	614	+ 136	122
Total cash received	1858	2186	- 328	85
Home produced foods 3/	226	129	+ 97	175
Total	2084	2315	- 231	90
Expenses				
Feed	53	56	- 3	95
Crops	160	176	- 16	91
Automobile	104	45	+ 59	231
Tractor and truck	135	117	+ 18	115
Other machinery	22	32	- 10	69
Building and land	8	11	- 3	73
Livestock	18	13	+ 5	138
Hired labor	34	52	- 18	65
Other (farm)	52	50	+ 2	104
Current farm cash expense	586	552	+ 34	106
Capital goods	476	419	+ 57	114
Debt payments	490	373	+ 117	131
Family living expenditures	371	317	+ 54	117
Total cash expended	1923	1661	+ 262	116
Home produced foods 3/	226	129	+ 97	175
Total	2149	1790	+ 359	120

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 5 families keeping a record of farm products used in the home.

MONTHLY TRENDS OF RECEIPTS AND EXPENSES
(Figures 1 and 2 discussed)

A comparison of crop and livestock farms shows important differences in the seasonal trend of receipts and expenses. On livestock farms receipts were appreciably above farm and home expense throughout the year, except in March, April, and May, when receipts and expenses were about the same. Receipts for livestock farms were approximately $75 per month from January to July, declined to about $55 per month in August and September, rose sharply to a seasonal high of $199 in October when crops and some cattle were sold, and then declined to less than $100 per month in November and December.

For crop farms, receipts were appreciably below farm and home expense in March, April and May; about the same in June and July, and for the remainder of the year and in January were above farm and home expenses. Receipts for crop farms declined from an average of $102 per farm in January to a seasonal low of $40 in April, then rose slowly to approximately $100 in September, and then increased sharply to a seasonal high of approximately $225 for November and December, when crops were marketed.

Farm expense was fairly uniform throughout the year on livestock farms except for slight rises in the spring when considerable field work was being performed and at harvest time in October. October was the only month when farm expense was above $50 per farm, however, farm expense was almost $50 in March and May. For crop farms the expense was more variable than for livestock farms and often greater. On crop farms the farm expense was above $50 per farm in March and April and from September to December, inclusive.

The fairly uniform distribution of expenses and receipts throughout the year is desirable because the seasonal needs for credit are reduced. During months when farm and home expenses are above receipts, credit must be used if the farmers do not have cash reserves. Yearly fluctuations in receipts and expenses for livestock farms are generally not as great as for farms on which cash crops are the principal source of income.

LEGEND

Receipts (Loans not included)

Farm and Home Expense

Farm Expense

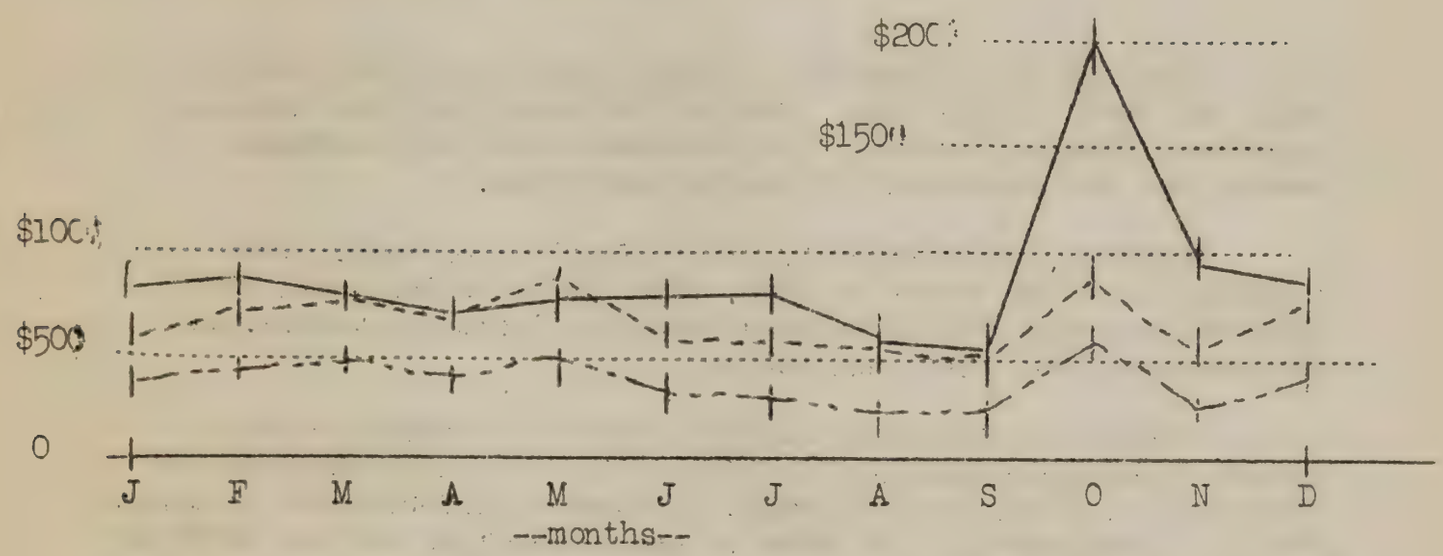


Fig.1. A comparison of the average monthly receipts and expenses for 26 livestock farms in Area 4, 1940.

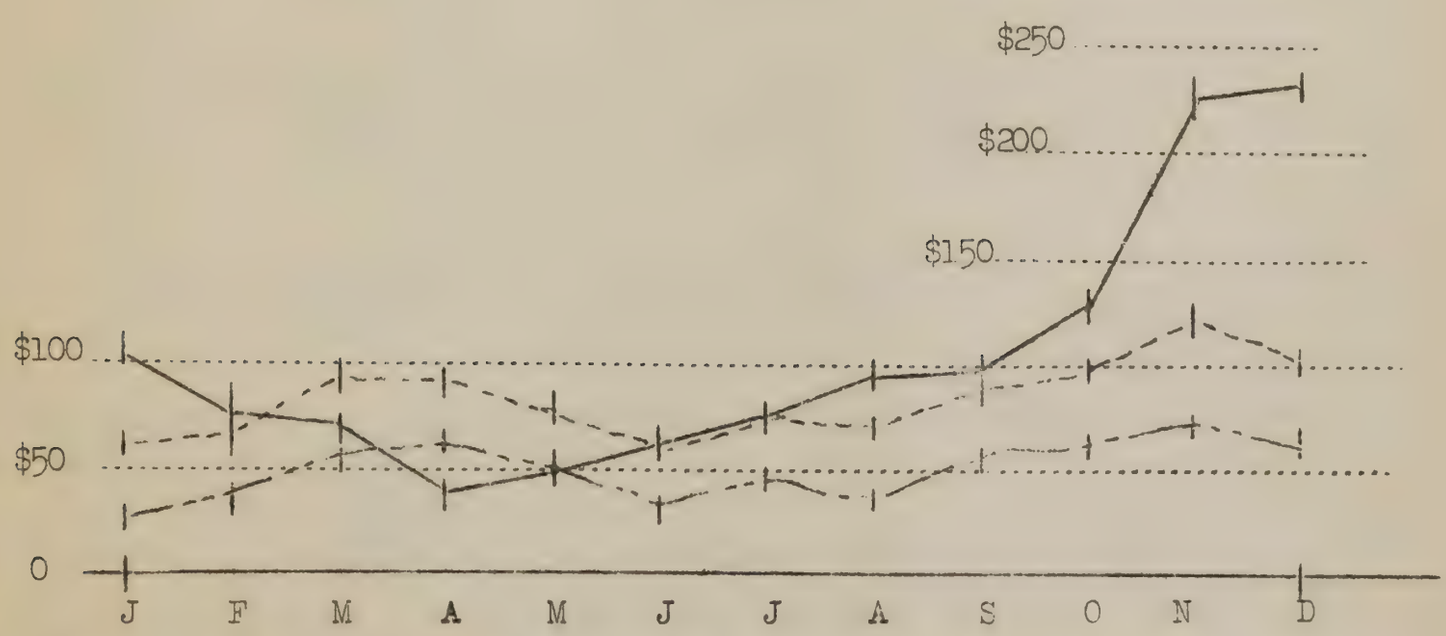


Fig.2. A comparison of the average monthly receipts and expenses for 24 crop farms in Area 4, 1940.

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS FOR SMALL FARMS
(Figure 3 discussed)

Eight of the 21 families on small farms had a decrease in their net worth during 1940. Four of the eight families increased both their debts and assets, two increased debts and decreased assets, and two decreased both assets and debts.

Thirteen, or 61 percent, of the families on small farms increased their net worth in 1940. Four families increased both debts and assets, seven decreased debts but increased assets, and two decreased both debts and assets.

Farmers who increase their net worth are making progress towards becoming rehabilitated. Those with decreases in net worth represent a serious problem group. Changes in indebtedness or assets should be considered in relation to their effect on the net worth of the families over a period of years. Loans should be increased or liquidated depending on the kind and amount of land, machinery, livestock, and labor available for each farming unit. Most important is the ability of the operator of the farm to manage various sizes and types of farm enterprises. Records of physical production such as eggs per hen, pounds of butterfat per cow, pigs per litter, percent of cows raising calves, mortality of livestock, and crop production are urgently needed to assist supervisors in judging the managerial ability of the clients and to furnish a basis for improving the administration of the FSA loan program.

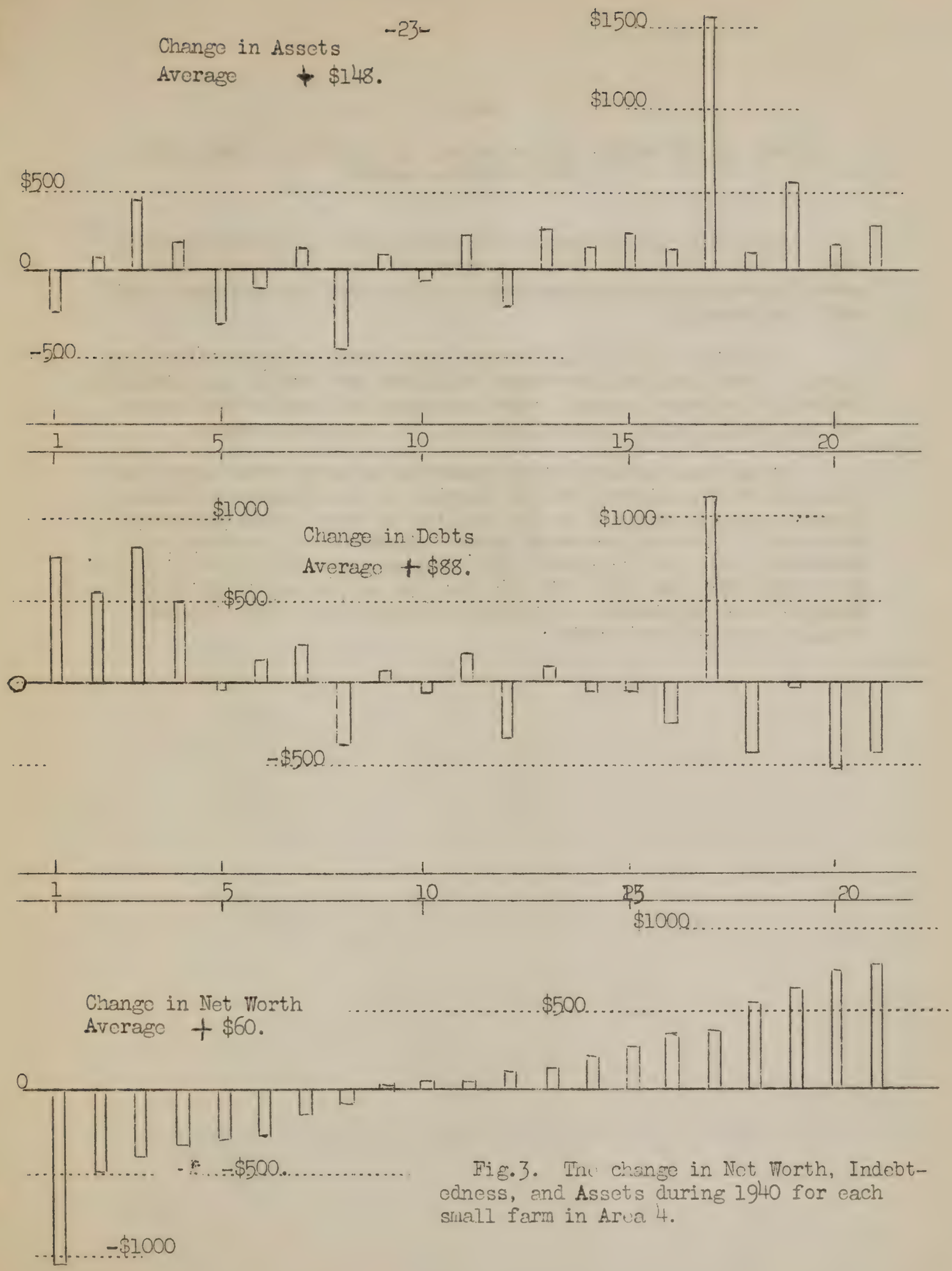


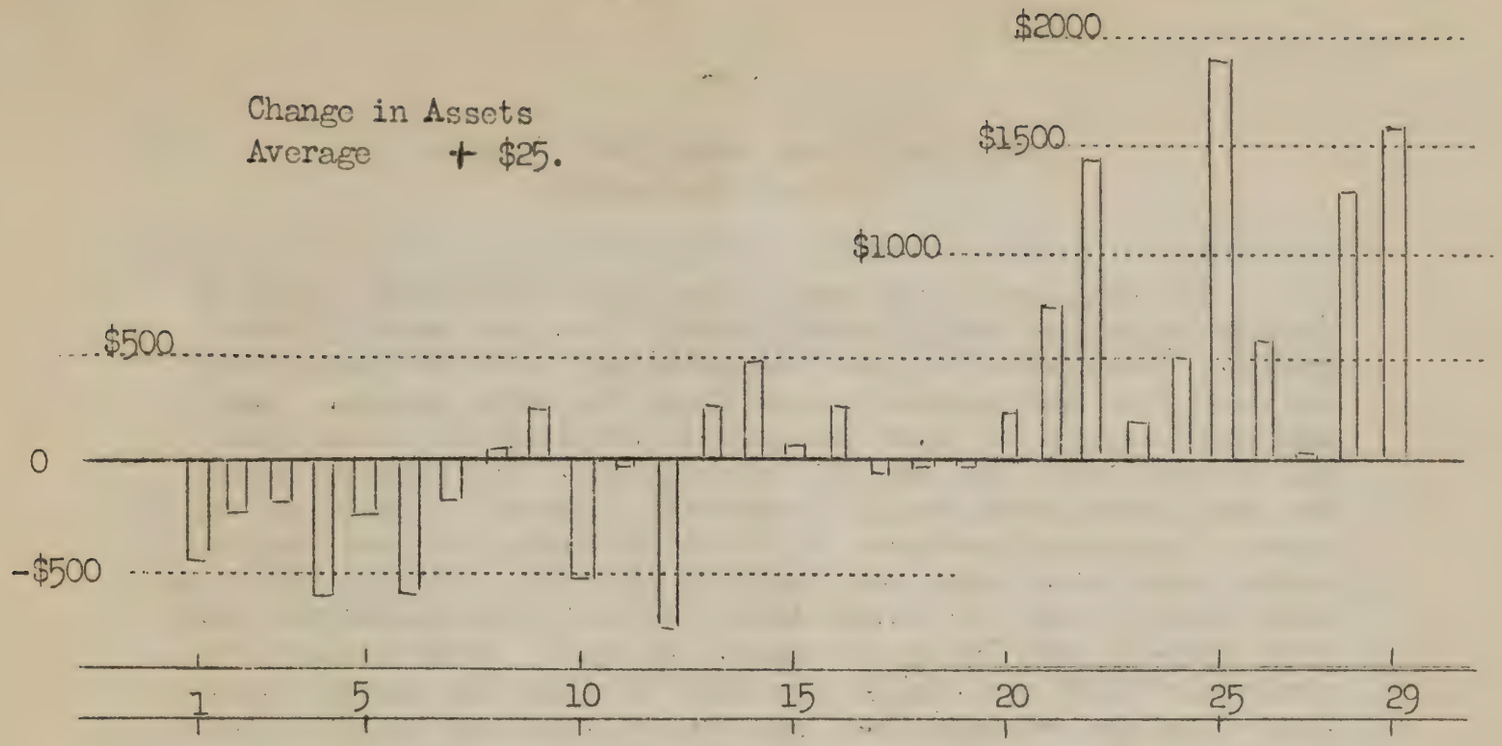
Fig.3. The change in Net Worth, Indebtedness, and Assets during 1940 for each small farm in Area 4.

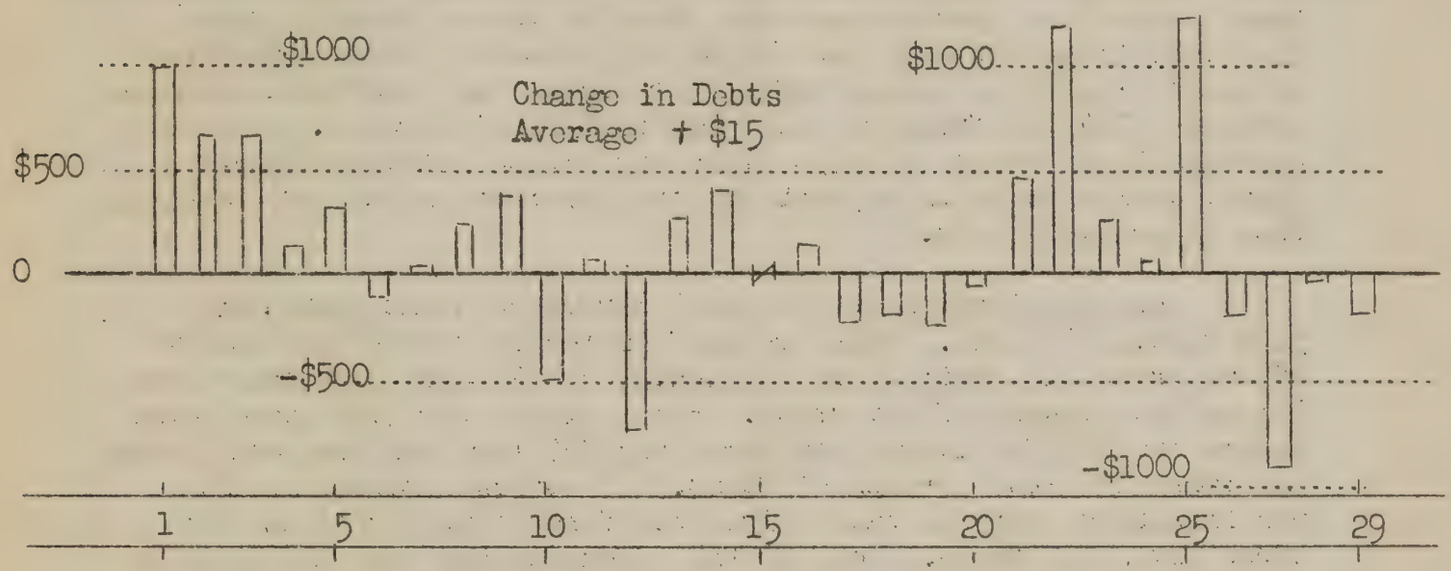
CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS FOR LARGE FARMS
(Figure 4 discussed)

Twelve of the 29 families on large farms decreased their net worth. Three of the 12 families decreased both debts and assets, seven increased debts but decreased assets, and two increased both debts and assets.

Seventeen of the families on large farms increased their net worth. Seven families increased both debts and assets, six decreased debts and increased assets, three decreased both debts and assets, and one family had no change in debts but increased assets.

Fifty nine percent of the families on large farms increased their net worth compared with 61 percent of the families on small farms. Also, 41 percent of the families on large farms decreased debts and 52 percent increased assets compared to 52 percent that decreased debts and 71 percent that increased assets on small farms. It is concluded that for 1940 the families on the small farms were slightly more successful in becoming rehabilitated than were the families on the large farms.





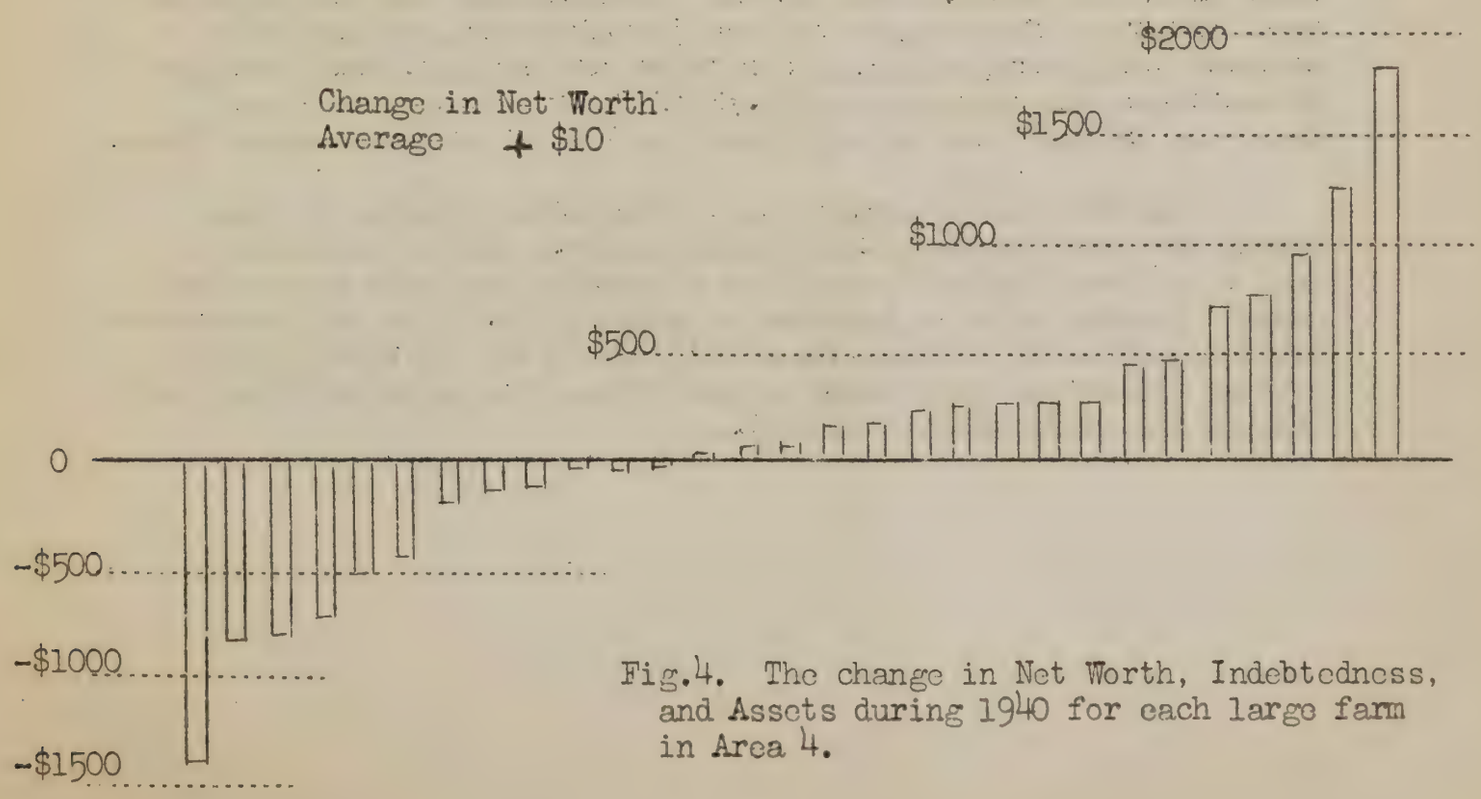


Fig.4. The change in Net Worth, Indebtedness, and Assets during 1940 for each large farm in Area 4.

ORGANIZATION AND EFFICIENCY FACTORS
(Table 8 discussed)

The families on the small crop farms were using a type of farm organization that differed greatly from that used by other groups. Investments in power and machinery of $5.25 per acre of cropland were approximately twice those for other groups. Cash machinery expense of $1.88 per acre of cropland was about twice the average costs per acre for other groups. The average size of the small crop farms was 127 acres with 90 acres of cropland and 32 acres of permanent pasture. All of these facts indicate families on the small crop farms were applying intensive farming methods to small acreages and the comparative size of their incomes show that their mettods were fairly successful in 1940. Their family farm earnings of $577 per family were only $6 under the highest group. Their earnings averaged $6.41 per acre of cropland which was more than three times greater per acre than for large farms and more than four times greater than for small livestock farms. Families on small crop farms earned $283 other income not from the farm compared to $167 per farm for all farms analyzed in area 4. A comparison of the types of crops grown and yields obtained would be highly desirable at this point but the information was not available from the record books.

The organization of the small livestock farms gave very poor results in 1940. Their gross farm receipts were the lowest of any group and their average expenses of $72 per $100 gross farm income was highest of any group. Farm expense per $100 gross farm income was $63 for large crop farms and $57 for both the small crop and large livestock groups of farms. Livestock expense was $14 per livestock unit for small livestock farms compared to $9 for large livestock farms. Some of the added expense for livestock on small livestock farms may have been justified since their dairy products sold averaged $39.03 per dairy cow and eggs sold averaged 59 cents per hen compared to $36.38 of dairy products sold per dairy cow and 43 cents of eggs sold per hen on large livestock farms.

Too often it is assumed that additional land is the only remedy for small unsuccessful farming units. In the analysis of area 4 we have found that families on small crop farms were as successful in many ways as families on large farms. For many unsuccessful small farms in eastern New Mexico it may be advisable to adopt methods similar to those used on the 15 small crop farms rather than attempt to secure additional land.

Table 8. - Measures of Farm Organization and Efficiency of Operation by Size and Type of Farms, 1940, Area 4.

Efficiency and Organization Factors		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
		(dol.)	(dol.)	(dol.)	(dol.)	(dol.)
Investment in power per acre of crop land, Jan. 1	1/	1.58	3.11	1.33	1.22	1.58
Investment in machinery per acre of crop land, Jan. 1	2/	1.03	2.14	.78	.44	.91
Tractor and truck expense per acre of crop land	3/	.36	.98	.28	.47	.44
All machinery expense per acre of crop land	4/	1.08	1.88	.75	.91	.98
Total farm expense per $100 gross farm income	5/	72.40	57.43	57.07	62.65	59.32
Livestock expense per livestock unit	6/	14.21	11.43	8.70	8.76	9.63
Debts per $100 farm property Jan. 1		52.25	37.53	55.07	46.54	48.72
Family farm earnings per farm	7/	183.	577.	469.	583.	490.
Non-farm earnings per farm		175.	283	125	62.	167.
Family farm earnings per acre of crop land		1.39	6.41	2.02	2.04	2.62

1/ Investment in power is the beginning inventory of tractors and work stock.

2/ Value of tractor, truck, and automobile not included.

3/ Expense does not include depreciation.

4/ Tractor, truck, and automobile expense included, depreciation not included.

5/ Total farm expense includes current farm cash expense, capital goods purchased, and decrease in the inventory of farm property. Gross farm income includes cash farm receipts, increase in the inventory of farm property and family living furnished by the farm.

6/ Livestock units are calculated from the beginning inventory of work-stock, dairy cows, sows, sheep, and hens. Livestock expense includes feed purchased and other livestock expense exclusive of livestock purchased or change in livestock inventory.

7/ Family farm earnings are the cash farm receipts, increase in farm inventory, and the value of home produced foods; less current farm cash expense, capital goods purchased, decrease in farm inventory, and five percent interest on operators equity of farm property as of January 1, 1940

PLANNED AND ACTUAL CASH EXPENDITURES FOR FAMILY LIVING
(Table 9 discussed)

Expenditures for all items of family living totaled $50 above those planned. None of the various items consumed by all of the families varied more than $9 over or under the planned consumption except food, which exceeded the plans by $44. A large part of this difference may be accounted for in the fact that home production of foods did not equal the quantities as set up in the home plans.

Small families exceeded the planned expenditures for food by $33 and the large families exceeded their planned expenditures by $50. However, expenditures made by the large families for other items were much nearer the planned figures than those made by the small families.

By comparison the large families were twice as large as the small families but spent only one-fourth more for all items of family living. The total value of food consumed by the large families was, however, 57 percent more than that consumed by the small families.

The following sumarizes briefly planning and purchase and production of foods for the table by the families in this study. Values of foods planned and produced 1/ by the families reporting have been interpolated with the cash purchase of foods of all of the families.

	Small families		Large families		All families	
	Planned	Actual	Planned	Actual	Planned	Actual
Total value of food consumed	$333	$286	$421	$449	$383	$380
Home produced	234	154	293	271	268	221
Purchased	99	132	128	178	115	159

To a large extent the lack of production of foods from the farm was made up through cash purchases of food. All of the families fell short of their planned production by $47 worth of food. On the other hand, their purchases were $44 in excess of the planned expenditures for food. From the data given above, it would appear that the small families need to increase their efforts toward greater production of food for the table. The large families need to plan for and to actually produce more food.

Plans were for the small-family person to have $2.00 worth of food per week. Actually, he consumed $1.72 worth. It was planned that the large family person would have $1.27 worth of food per week. He consumed $1.35 worth. When consumption of food was computed on an adult male equivalent 2/ basis, the small-family adult male consumed food valued at $2.29 and the large-family adult male consumed food valued at $1.88, or a difference of $0.41 per week.

1/ The farm value of home-produced food is used here.
2/ See Appendix, table 1, Adult male equivalent scale used to weight food consumption of family members.

Table 9. - PLANNED AND ACTUAL EXPENDITURES FOR ITEMS OF FAMILY LIVING, BY SIZE OF FAMILY, 1940, AREA 4 1/

Item	Small families 2/			Large families 2/			All families 2/		
	Planned	Actual	Difference	Planned	Actual	Difference	Planned	Actual	Difference
Food	$ 99	$132	$ + 33	$128	$178	$ + 50	$115	$159	$ + 44
Clothing	41	37	- 4	76	77	+ 1	62	60	- 2
Personal	19	11	- 8	15	12	- 3	17	11	- 6
Medical	30	41	+ 11	31	33	+ 2	31	36	+ 5
Household operation	55	43	- 12	44	44	-	49	44	- 5
Minor housing	3	1	- 2	3	5	+ 2	3	3	-
Minor furnishings & equip.	6	19	+ 13	10	7	- 3	8	12	+ 4
School, church, gifts, recrea.	13	10	- 3	23	21	- 2	19	17	- 2
Life insurance	10	14	+ 4	6	7	+ 1	7	10	+ 3
Other	0	10	+ 10	2	10	+ 8	1	10	+ 9
Total	276	318	+ 42	338	394	+ 56	312	362	+ 50

1/ Small families: those having less than five members. Large families: those having five or more members.

2/ Total families 50 : small families 21: large families 29 .
Average size of all families 5.1: small families 3.2: large families 6.4.
Average adult male equivalent of all families 3.7 : small families 2.4 : large families 4.6 .

PLANNING PERFORMANCE
(Table 10 discussed)

Those 14 small families who underplanned their family living expenditures did so in the average amount of $89. The 7 families who overplanned did so in the amount of $51. For 21 large families underplanning averaged $92 and for 8 large families overplanning averaged $39.

Six small families found that their actual expenditures exceeded their planned expenditures in amounts of over $100, one of which spent $366 in excess of the amount set up in the home plan. Seven large families exceeded their planned expenditures by over $100, two of which were in amounts of $229 and $234. Nineteen families confined their expenditures to within $50 or less, over or under the planned expenditure.

If home production of foods had equalled or exceeded the quantities set up in the home plans, the average amount of family living expenditure in excess of the plans would have been materially reduced. It would seem expedient for these low-income families to place greater emphasis on home production of foods and to at least produce three-fourths of the total value of that which they consume.

Table 10. - ANALYSIS OF HOME PLANNING, BY SIZE OF FAMILY, 1940, AREA 4 1/

Amount under or over planned	No. of Small Families		No. of Large Families		No. of Families	
	Under Planned	Over Planned	Under Planned	Over Planned	Under Planned	Over Planned
$ 1-25	3	2	1	2	4	4
26-50	1	2	4	4	5	6
51-75	4	2	4	1	8	3
76-100	0	0	5	1	5	1
101 & over	6	1	7	0	13	1
Total	14	7	21	8	35	15
Average amount	$89	$51	$92	$39	$91	$44

1/ Small families: those having less than five members.
Large families: those having five or more members.

MONTHLY DISTRIBUTION OF EXPENDITURES
(Table 11 discussed)

Neither various months nor seasons were equal in their demands for the expenditure of resources for family living. The small families spent the least ($24) in March and the most ($33) in May. The large families spent the least ($27) in each of the months of January and April and the most ($44) in November. Both small and large families spent 24 percent of their year's expenditures for family living during the winter months of January, February, and March. During the spring, summer, and fall seasons, family living of the small families took 26, 24, and 26 percent, respectively, of the year's cash outlay for this purpose. For the large families, these percents were 23, 24, and 29 percent, respectively.

When sales of farm products were being made during the late summer and fall, there was a tendency to concentrate greater purchases to that period. Fall and winter needs plus education and holiday expense, also contributed demands for their share of the resources.

Contrary to what might be expected, expenses during the summer did not tend to decrease, that is, during that season when subsistence was available from the garden and when needs peculiar to other seasons of the year were at a minimum.

Table 11. - MONTHLY DISTRIBUTION OF FAMILY LIVING EXPENDITURES, BY SIZE OF FAMILY, AREA 4, 1940 1/

Month	Small families (Amount)	Large families (Amount)	All families (Amount)
January	$27	$27	$27
February	25	30	28
March	24	35	30
April	32	27	29
May	33	33	33
June	19	32	26
July	24	30	27
August	26	36	32
September	26	29	28
October	25	33	30
November	26	44	37
December	31	38	35
Total	$318	$394	$362

1/ Small families: those having less than five members
Large families: those having five or more members.

HOME-PRODUCED FOODS
(Table 12 discussed)

Ninety percent of the total value of foods produced from the farm by both small and large families came from livestock and livestock products items and 10 percent came from garden and orchard products items. It was planned, however, that the small families would obtain 91 percent of the total value of home-produced foods from livestock and livestock products items, whereas the large families were to obtain 83 percent from these sources and the balance from garden and orchard products.

The small families produced 66 percent of the planned production of foods and the large families 92 percent. In no item did the small families produce as much for the table as they had planned. Their production of milk for table use was far below that planned, yet these families showed an inventory of five dairy cows each. The large families had six dairy cows. The large families exceeded their planned milk, mutton, and egg production and for the other items approached closely the planned figures.

The total value of food purchased and produced 1/ by the small families was $286. If all the food consumed had been purchased, the cost would have been $381. The additional expenditures would have necessitated reduction in expenditures for other items of family living or of some farm operating items or of investment in capital goods. Among the large families, the former figure was $449 and the latter would have been $622.

Both the small and the large families need to increase their efforts toward greater production of food for the table. If the large families are to reduce their cash expenditures for food, their planning "benchmark" as well as their actual production of foods will have to be increased considerably. During 1940 the small families produced only 54 percent of the total value of food consumed and the large families 60 percent, both figures are below the minimum 75 percent being advocated by the Farm Security Administration.

1/ The farm value of home-produced food was used here.

Table 12. - SUMMARY OF HOME-PRODUCED FOODS PLANNED AND USED BY THE FAMILY, BY SIZE OF FAMILY, 1940, AREA 4 1/

Items	Unit	Small families 2/				Large families 2/				All families 2/			
		Plan'	Used	Farm value	Retail value	Plan'	Used	Farm Value	Retail value	Plan	Used	Farm value	Retail value
Milk	gal.	325	224	$49	$94	449	509	$112	$214	396	388	$85	$163
Cheese	lb.	14	5	1	1	22	4	1	1	19	4	1	1
Butter	lb.	80	52	13	17	106	100	25	32	95	80	20	26
Cream	gal.	17	13	16	23	24	14	17	25	21	14	17	25
Lard, fat pork, bacon	lb.	169	135	13	20	165	118	12	18	167	125	13	19
Lean pork	lb.	237	110	14	22	237	235	31	47	237	182	24	36
Beef, veal	lb.	135	61	8	14	68	41	6	9	96	49	7	11
Mutton, lamb	lb.	-	-	-	-	8	31	4	7	5	18	2	4
Fish, game	lb.	-	-	-	-	3	-	-	-	1	-	-	-
Poultry	lb.	71	42	8	10	58	54	10	13	64	49	9	12
Eggs	doz.	113	83	16	21	117	137	26	34	115	114	22	28
Dried beans and nuts	lb.	29	12	-	1	81	61	2	3	59	40	1	2
Tomatoes	lb.	150	100	3	6	300	150	4	9	236	129	4	8
Leafy g and y vegetables	lb.	250	250	8	10	400	275	8	11	336	264	8	11
Other vegetables	lb.	300	250	5	10	500	300	6	12	415	279	6	11
Fruit	lb.	-	-	-	-	150	100	4	6	86	58	2	2
Potatoes	lb.	-	-	-	-	60	-	1	1	35	-	-	-
Sweet Potatoes	lb.	55	-	-	-	110	55	1	1	87	32	-	1
Flour	lb.	-	-	-	-	84	29	1	1	48	17	-	1
Cereal	lb.	-	-	-	-	22	-	-	-	13	-	-	-
Meal	lb.	14	11	-	-	17	10	..	-	16	11	-	-
Syrup, sorghum, and honey	qt.	-	-	-	-	2	-	-	-	1	-	-	-
Total	xx	xx	xx	154 3/	249	xx	xx	271 3/	444	xx	xx	221 3/	361

1/ Small families: those having less than five members.
Large families: those having five or more members.

2/ Total families reporting, 33; small families, 14; large families, 19.

3/ Farm value of home-produced foods planned by all families, $268; by small families, $215; by large families, $293.

CONSERVED FOODS
(Table 13 discussed)

An average of 160 quarts of fruits, vegetables and meats were carried over from the previous year by each of the families. The small families carried over 165 quarts and the large families 156 quarts. The Farm Security Administration has stressed the importance of carrying over a quantity of foodstuffs sufficient for a full years needs beyond the beginning of the next fresh fruit and vegetable season. The quantity carried over by the families, unless supplemented by a considerable quantity of dried and stored products, will hardly be sufficient to provision the families for a period of five months or until the next fresh fruit and vegetable season.

Both small and large families were below planned performance in their conservation of tomatoes, vegetables and fruits. A small portion of this deficiency was made up through conserving of jams, jellies, pickles and kraut in excess of the plan. The small families exceeded plans in their preservation of meats.

As indicated in another section, it is highly important that the families make every effort to have an abundant supply of foodstuffs and particularly so during the spring of the year when resources for purchase of foods are at a minimum.

Table 13. - SUMMARY OF CANNING ACTIVITY, BY SIZE OF FAMILY, 1940, ARE. 4 1/

Item	Unit	Small families 2/			Large families 2/			All families 2/		
		On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.
Canned:										
Tomatoes	qt.	23	53	38	31	99	51	27	79	45
Vegetables	qt.	75	115	61	60	175	102	67	150	84
Fruit	qt.	52	89	51	55	138	102	54	117	81
Fruit juice	qt.	2	1	12	1	5	9	1	3	9
Meat	qt.	8	19	18	3	22	22	5	20	20
Jams & jellies	qt.	1	0	9	3	6	10	2	3	9
Pickles	qt.	4	4	10	2	9	16	3	7	14
Kraut	qt.	0	0	2	1	5	7	1	3	5
Total	qt.	165	281	201	156	459	318	160	382	267
Smoked & salted meat	lb.	7	64	108	16	129	91	12	101	98

1/ Small families: those having less than five members. Large families: those having five or more members.

2/ Total families reporting—35; small families—15; large families—20.

HOUSEHOLD INVENTORY
(Table 14 discussed)

For the most part, the families seemed to have adequate furnishings and equipment to take care of their needs. The household inventory of the small families was valued at $266 and that of the large families at $327. Clothing of the former was valued at $33 and of the latter at $47.

The large families did show a greater frequency of most of the large items than did the small families, particularly those as determined by size and need of family. However from the data, it would appear that the large families were using makeshift chairs to accommodate members at the table. Also some of the floors had no coverings as shown by the fact that only one family in ten reported a rug.

Three out of five families reported radios, one out of five a refrigerator, every family a sewing machine and a pressure cooker.

Possession of sewing machines would indicate that all of the women are making an effort to supplement clothing purchases with many home-made items of clothing. Too, since each family has a pressure cooker, it is prepared to make the most use of home produced foodstuffs and to conserve them in the best approved manner and with the least risk of spoilage.

TABLE 14 - INVENTORY OF HOUSEHOLD ITEMS, BY SIZE OF FAMILY, 1940, AREA 4 1/

Item	Small families 2/	Large families 2/	All families 2/
Single beds	.2	.6	.5
Double beds	1.9	2.3	2.1
Single mattresses	.2	.6	.4
Double mattresses	2.1	3.0	2.6
Blankets, etc.	1.9	3.5	3.0
Comforts & quilts	11.1	10.0	10.4
Davenport or couch	.4	.6	.5
Chest of drawers	1.2	1.2	1.2
Straight chairs	4.7	4.6	4.6
Easy rockers	1.4	.7	1.0
Dining tables	1.0	.9	.9
Other tables	.3	.6	.5
Cupboards	.8	.6	.7
Radios	.5	.6	.6
Rugs	.0	.1	.1
Linoleums	1.5	1.0	1.2
Refrigerators	.2	.2	.2
Sewing machines	1.0	1.0	1.0
Pressure cookers	1.0	1.0	1.0
Jars	214	233	225
Value of clothing	$33	$47	$41
Value of household inventory	$266	$327	$302

1/ Small families: those having less than five members.
Large families: those having five or more members.

2/ Total families reporting--49; small families--21; large families--28.

APPENDIX

Table 1.- CONSUMPTION UNIT SCALE

Age in years	Child	Weights in Terms of Adult Male Boy or Man	Girl or woman
1.	.4		
2.	.5		
3.	.55		
4.	.6		
5.	.65		
6.	.75		
7.	.75		
8.	.8		
9.	.8		
10.	.85		
11.		.95	.85
12.		.95	.95
13.		1.0	1.0
14.		1.0	.95
15.		1.05	.9
16.		1.15	.85
17.		1.1	.85
18 to 59		1.0	.95
60 and over		1.0	.9

Adopted from scale of weighing food consumption published by E. L. Kirkpatrick Rosalind Tough and May L. Cowles in "How Farm Families Meet the Emergency", Wisconsin Agricultural Experiment Bulletin 126.

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UNITED STATES DEPARTMENT OF AGRICULTURE

FARM SECURITY ADMINISTRATION

in cooperation with

BUREAU OF AGRICULTURAL ECONOMICS

Analysis of 39 FSA Farm and Home Record Books in the Western Part of New Mexico, 1940

Counties

Bernalillo	Luna	Santa Fe
Catron	McKinley	Sierra
Dona Ana	Otero	Socorro
Grant	Rio Arriba	Taos
Hidalgo	Sandoval	Torrance
Lincoln	San Juan	Valencia

October, 1941

ANALYSIS OF FARM FAMILY RECORD BOOKS FOR AREA 3, 1940

The farm Security Administration, Region 12, and the Division of Farm Management and Costs and the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics, cooperated in the analysis of Farm Family Record Books kept by FSA clients in 1940. Due credit should be given to the farmers who kept these record books and the county FSA personnel who gave the farmers assistance and sent these books to the regional office. All preliminary tabulations and summations from these books were made by Work Projects Administration under Official Project No. 65-2-66-622.

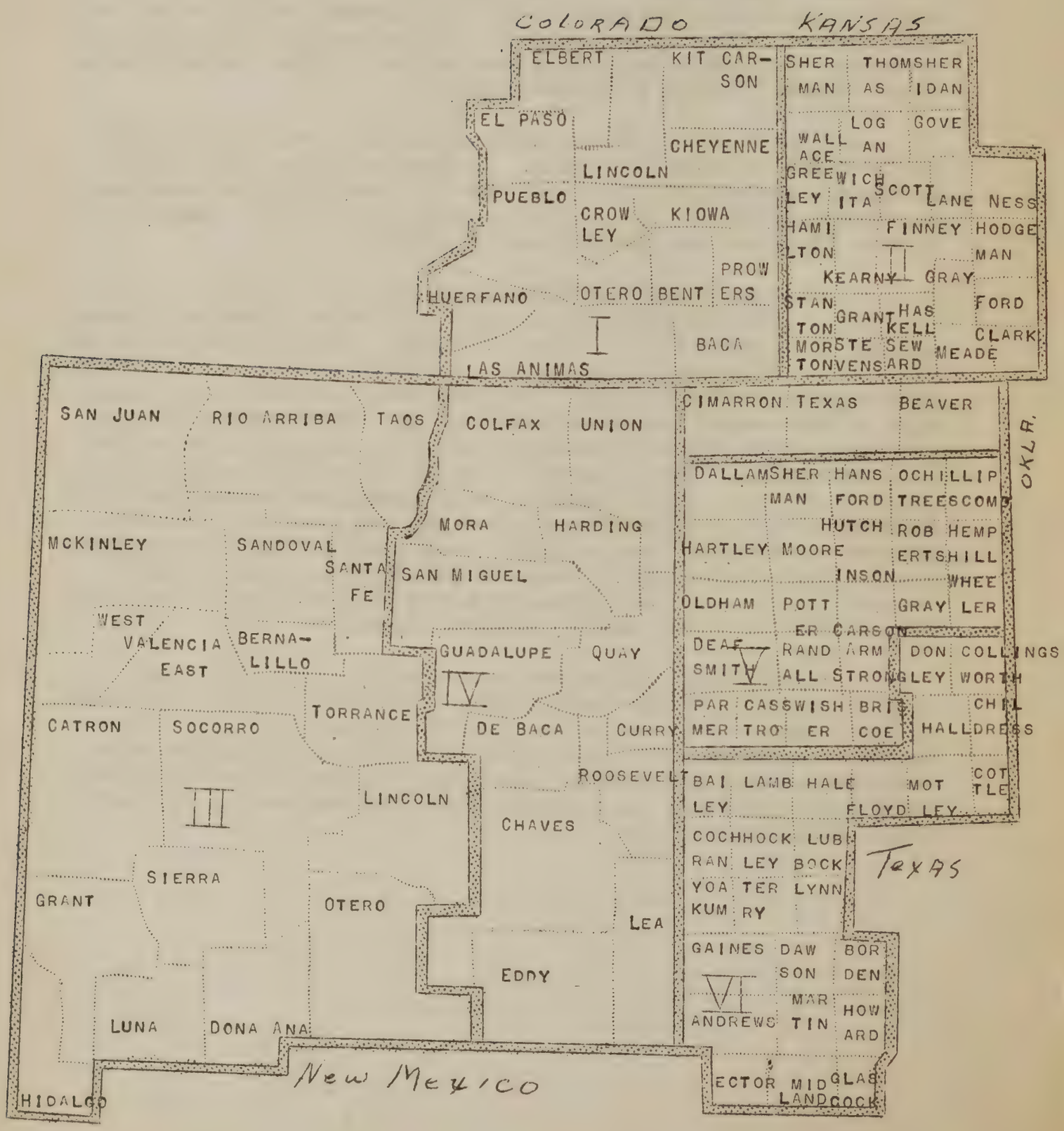
Region 12 of the FSA was divided into six areas, principally on the basis of types of farming. Wherever possible, FSA district boundaries were followed in order that the results of the study would be directly useful to FSA district supervisors. In some cases, two or more districts are combined into one area.

To make the results of these analyses of the greatest use in planning to Farm Security Administration personnel, farms were grouped by size and type of farm and size of family. Size of farm groups were determined within each area, placing about one-half as small farms and the other half as large farms. Only two classifications were made for type of farms--crop and livestock. The type of farm classification was based on the farmer's sales and inventory reportings and on the 1940 farm plans. Size of family is reflected in the planning and consumption behavior of the families, the proportionate expenditures for various items of family living, the amount and kinds of subsistence produced on the farm, the extent of their conservation of foods program and some indication of their household inventories. On the basis of family size, two groupings were made--families of less than five persons and those of five or more persons.

According to an FSA report dated June 24, 1941, there were 3,983 Farm Family Record Books in this area. Only 184 were sent in to the regional office to be used in this study. Of these, 39 were complete enough for use in the final tabulations. Tables are presented with brief explanatory statements that should furnish assistance and guidance to county and district FSA personnel in the working out of farm and home plans.

DEC 12 1942

ANALYSIS OF FSA RECORDS BY AREAS FOR REGION XII



SUMMARY AND CONCLUSIONS

1. Only a few farmers reported production of crops and livestock and they obtained low yields per unit. The actual crop sales compared to the planned indicated all 39 farmers had lower yields than planned. Greater production than was actually obtained is necessary if these farmers are to earn a living on the farm. Production efficiency should be emphasized and reemphasized to these farmers because the rates of production in 1940 did not permit these farmers to operate without some form of subsidy.

2. The volume of business was not large enough for these farmers to earn a living from livestock and field crops. On most of the farms the livestock enterprises were small subsistence enterprises and did not permit any appreciable amount of cash income from livestock or livestock products. Most of the farms had only a small acreage of truck crops that demanded only a part of the available family labor. A farm business as small as most of these farmers had should be reorganized and more intensive enterprises included. Farm enterprises that use a greater part of the family labor and yield larger returns should be included in the organization of these farms.

3. Too large a proportion of the planned farm income was from crop sales. Some farms included in this study had irrigated land and the crops yielded as planned. In dry land localities, crops did not yield enough for low income farmers to bear the risk of production. A shift from crops to livestock would give these farmers a more dependable income. The county RR supervisor has a big job assisting low income farmers in this area. When determining what changes should be made on each farm, the RR supervisor's best guide is the client's farm family record book.

4. The total value food consumed by the large families exceeded by one fifth that of the small families. Their consumption did not approach their proportionate size inasmuch as there were almost twice as many members in the large families as in the small families. The planning of larger quantities as well as greater actual production of foods from the farm should be stressed. Also more emphasis should be given to the conserving program so as to provide a reservoir of foodstuffs for times of drouth or other adverse conditions.

5. In order to stabilize the availability of resources for family living and to reduce the trend to heavy expenditures during the latter part of the year, an effort should be made toward production of those products from which a steady year round income may be realized. Adequate well balanced diets are extremely important during the winter and spring but cannot be had from a crop farm economy yielding small returns.

6. On the whole, it would appear that the small families fared considerably better than the large families, not only as pointed out in 4, but also from the standpoint of home comforts. Their household inventory indicates that there was an adequacy of most items except perhaps radios, refrigerators, sewing machines and pressure cookers. Inasmuch as many of the large families are Spanish American, relative values imposed by their traditional style of living have considerable influence in determining whether the families in this group consider themselves reasonably comfortable with the household items at their disposal.

ACRES OF LAND, SIZE OF FAMILIES AND INVENTORIES
(Table 1 Discussed)

Farms in the western part of New Mexico were grouped into farms of less than 160 acres in size and farms of 160 acres and over. The small farms were subdivided into livestock and crop farms but as most large farms were livestock farms, they were kept in one group. The large farms had 10 times the acreage of small farms but the value of land owned by farmers on small farms was inventoried at $26.40 per acre while land owned by farmers on large farms was valued at $2.78 per acre. The proportions of land used for crop land were 90% on the small crop farms, 44% on small livestock farms and 27% on large farms.

The large farms were under stocked in comparison to small farms, though large farms had poorer land as was indicated by values of land per acre. Small livestock farms had approximately the same numbers of cattle as the large farms. Small crop farms did not have enough dairy cows to supply the home with milk. Hogs were kept in largest number on the small livestock farms while sheep were kept only on small livestock and large farms. The number of productive animal units was almost the same for small livestock and large farms yet large farms had more land.

Livestock numbers were increasing on these farms, but should increase faster than they did in 1940. Feed crops must have matured on these farms because feed supplies were increased, although the cash crops failed to produce the cash income that was planned. Part of the crop land on these farms was irrigated and that permitted some of the farmers to produce crops. This increase of feed should be followed with increased livestock numbers if these farmers accumulate enough working capital to be rehabilitated.

Table 1. Acres of land, size of families, and inventories of feed and livestock for farms by size and type in Area 3, 1940

Item	Unit	Small Livestock Farms	Small Crop Farms	Total Small Farms	Total Large Farms	Total All Farms
Number of farms	No.	10	12	22	17	39
Cropland	Acre	39	45	42	182	103
Permanent Pasture	Acre	48	2	23	491	227
Total land in Farms	Acre	89	49	67	683	335
Persons in the family	No.	6.1	4.9	5.5	5.5	5.5
Adult males 16 yrs.,more	No.	1.2	1.5	1.4	1.4	1.4
Grain						
January 1	Bu	71	16	41	57	48
December 31	Bu.	125	51	85	114	98
Roughage						
January 1	Ton	6	9	7	3	6
December 31	Ton	9	13	11	10	11
Workstock						
January 1	No.	2.8	2.2	2.5	3.4	2.9
January 1	Dol.	198	131	162	158	160
Dairy Cows						
January 1	No.	3.9	.8	2.2	3.6	2.8
December 1	No.	4.0	1.5	2.6	4.2	3.3
Beef Cows						
January 1	No.	0.3	0.2	0.2	0.7	0.4
December 31	No.	0.1	0.2	0.1	1.2	0.6
Sows						
January 1	No.	2.3	.8	1.5	0.4	1.0
Sheep						
January 1	No.	10.3	0.0	4.7	16.9	10.0
Hens						
January 1	No.	46.0	18.0	31.0	32.0	31.0
Productive Livestock Units 1/						
January 1		6.7	1.4	3.8	7.1	5.2

1/ Productive livestock units were calculated from the beginning inventory of dairy cows, beef cows, sows, sheep and hens.

INVENTORIES OF FARM AND HOME PROPERTY AND INDEBTEDNESS
(Table 2 discussed)

Two-thirds of the 39 farmers owned automobiles. Machinery inventory was increased $13 and livestock inventory increased from $444 to $556 in 1940. The large farms had the greatest increase in livestock inventory during 1940, which amounted to $159, but all groups of farms had some increase in livestock inventories. Inventories of feed and supplies were valued at $90 more at the end of 1940 than at the beginning. Operators of small crop farms purchased an average of 10 acres of land per farm. This made an average of 20 acres owned by small farmers at the end of 1940.

Total assets increased $406 during 1940, while total indebtedness increased $204 1/ For all farms the assets increased $202 more than debts.

Based on the change in net worth, it appeared that farmers who rented their farms were gaining an equity in their farm business faster than farmers who owned their land. Thirteen of the 39 farmers owned all the land they operated and had an average increase in net worth of $151, while the average increase in net worth for all farmers was $202.

Farm Security Administration has not only financed the current liabilities of these farmers, but has financed the farmer's obligations to others. This fact was shown by a $204 increase in total indebtedness for 1940 while the amount owed FSA increased $340 during the same period.

1/ The increase in net worth during 1940 was $254 for small livestock farms, $176 for small crop farms, and $191 for large farms.

Table 2. Inventories of Farm Property, Household Property, and Indebtedness for Families Grouped According to the Size and Type of their Farms Area 3, 1940

Item		Unit	Small Livestock Farms	Small Crop Farms	Total Small Farms	Total Large Farms	All Farms
Farms		No.	10	12	22	17	39
Tractors	Jan. 1	No.	0	0	0	0.3	0.1
	Jan. 1	Dol	0	0	0	69	30
	Dec.31	No.	0	0	0	0.4	0.2
	Dec.31	Dol	0	0	0	82	36
Autos or Trucks	Jan. 1	No.	0.6	0.7	0.6	0.7	0.7
	Jan. 1	Dol	67	165	120	88	106
	Dec.31	No.	0.6	0.7	0.6	0.7	0.6
	Dec.31	Dol	60	148	108	74	93
Other Machinery	Jan. 1	Dol	173	161	167	165	166
	Dec.31	Dol	181	167	174	186	179
Livestock	Jan. 1	Dol	580	249	399	501	444
	Dec.31	Dol	660	320	475	660	556
Feed and Supplies	Jan. 1	Dol	132	282	214	156	189
	Dec.31	Dol	189	367	285	272	279
Real Estate Owned	Jan. 1	Ac.	22	9	15	328	151
	Jan. 1	Dol	714	321	500	1202	806
	Dec.31	Ac.	22	19	20	328	154
	Dec.31	Dol	881	580	717	1199	927
Total farm Inventory	Jan. 1	Dol	1666	1178	1400	2181	1741
	Dec.31	Dol	1971	1582	1759	2473	2070
Household Inventory	Jan. 1	Dol	400	227	306	265	288
	Dec.31	Dol	461	265	354	298	330
Cash, Savings, & Accounts due	Jan. 1	Dol	71	16	40	117	74
	Dec.31	Dol	75	56	65	166	109
Total Assets 1/	Jan. 1	Dol	2137	1421	1746	2563	2103
	Dec.31	Dol	2507	1903	2178	2937	2509
Indebtedness to FSA	Jan. 1	Dol	262	394	334	340	337
	Dec.31	Dol	415	712	577	807	677
Total Indebtedness 2/	Jan. 1	Dol	860	610	724	925	811
	Dec.31	Dol	976	916	943	1108	1015

1/ Includes real estate owned.
2/ Includes real estate mortgages on real estate owned.

COMPARISON OF ACTUAL AND PLANNED FOR 39 FARMS

(Table 3 discussed)

Cash farm receipts were $459 less than planned, of which $376 was caused from lower crop sales than planned. The farm and home plans gave too much stress to crop sales. It is impossible to predict the weather conditions in advance, but supervisors should check past records of crop production for different localities and determine the farmer's chances of obtaining a profitable yield on cash crops.

Other income, not from the farm, and money borrowed were each larger than planned because the farm failed to yield the needed income. Home produced foods were less than planned and 86 percent of the home produced foods was meat and other livestock products. The garden was probably as undependable as production of cash crops.

Current farm cash expense was four percent more than planned, although the different items of expense deviated considerably from the planned. With less return from crop sales than planned, it would be expected that expenditures for feed would increase but no increase would be expected in crop expense and expense for hired labor, as was the case on these 39 farms.

Because of lower farm receipts and higher farm expense than planned, the payments on debts amounted to 55 percent of the planned. Cash outlay for capital goods and family living increased in spite of a smaller farm income than planned. The total cash received by the farmer was $56 less than the total cash he expended.

The net cash farm income was derived by deducting current farm cash expense from cash farm receipts and was $68. The planned net cash farm income was $543. Current farm cash expense amounted to 87 percent of the cash farm receipts and the farm plans were worked out to use 45 percent of the receipts for current farm cash expense. The net cash farm income was only $68, but the cash living was $310 and capital goods purchased amounted to $179. These farmers should operate their farms with farm and home plans as a guide, but the plans must be workable or the farmers will in time disregard them altogether in earning a livelihood by farming.

Table 3 A comparison of the actual and planned receipts and expenses for 39 farms in Area 3, 1940.

Source of receipts or expenses	Average Per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	273	649	- 376	42
Poultry	17	35	- 18	49
Eggs	16	32	- 16	50
Dairy Products	32	41	- 9	78
Cattle	28	40	- 12	70
Hogs	29	55	- 26	53
Other livestock	27	26	+ 1	104
Other (farm)	39	26	+ 13	150
AAA payments	65	81	- 16	80
Cash farm receipts	526	985	- 459	53
Other income	219	137	+ 82	160
Money borrowed	334	289	+ 45	116
Total cash received	1079	1411	- 332	76
Home produced foods 3/	269	302	- 33	89
Total	1348	1713	- 365	79
Expenses				
Feed	74	55	+ 19	134
Crops	115	100	+ 15	115
Automobile	50	25	+ 25	200
Tractor and truck	36	24	+ 12	150
Other Machinery	16	13	+ 3	123
Building and land	5	6	- 1	83
Livestock	5	10	- 5	50
Hired labor	73	45	+ 28	162
Other (farm)	84	164	- 80	51
Current farm cash expense	458	442	+ 16	104
Capital goods	179	150	+ 29	119
Debt payments	188	343	- 155	55
Family living expenditures	310	292	+ 18	106
Total cash expended	1135	1227	- 92	92
Home produced foods 3/	269	302	- 33	89
Total	1404	1529	- 125	92

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 33 families keeping a record of farm products used in the home.

COMPARISON OF ACTUAL AND PLANNED FOR LARGE FARMS
(Table 4 Discussed)

The 17 farms classed as large farms failed by $340 of having as large cash receipts as planned. Less income from crop sales than planned accounted for $254 of this smaller farm income but the farmers reporting crop yields did not report lower yields than planned. It appeared the planned yield for crops in some cases was put in the book after the crop was harvested and made the same as the actual yield. Returns from sale of livestock and livestock products were below what had been planned on these farms. Production per unit for livestock products was low, because less than 100 pounds of butterfat per cow and 3.5 dozen eggs per hen were reported by some of these farmers.

Farm expenses were generally higher than planned for all items and the current cash farm expense was $482 or $120 greater than planned. Expenses for crop, automobile, tractor and truck and hired labor all increased although less crop was sold than planned. Feed expense was larger than planned because crop yields were low but sales of livestock and livestock products were less than planned.

The net cash farm income was $8 while $468 was planned. This low return from farming does not permit these 17 farmers to continue farming without some form of subsidy. Low yields probably caused some reduction in income, but the planning of receipts and expense for these farmers was poor. The automobile expense was planned at $18 per farm or $26 per automobile. License plates, one old tire, and minor repairs would cost $26 without considering the cost of gas and oil. This $26 for automobile was $58 less than actual, and was an example of careless planning.

Greater production efficiency should be stressed on these large farms if the farmers are to earn a living. If production efficiency is not increased the units should be divided and other families use the land that one family has been using inefficiently. Stressing larger production of livestock products per unit with less dependence on cash crops would certainly benefit these farmers.

Table 4 A comparison of the actual and planned receipts and expenses for 17 large farms in Area 3, 1940

Source of Receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	242	496	- 254	49
Poultry	6	12	- 6	50
Eggs	13	31	- 18	42
Dairy products	51	66	- 15	77
Cattle	23	52	- 29	44
Hogs	7	16	- 9	44
Other livestock	32	28	+ 4	114
Other (farm)	43	46	- 3	94
AAA payments	73	83	- 10	88
Cash farm receipts	490	830	- 340	59
Other income	268	139	+ 129	193
Money borrowed	276	193	+ 84	144
Total cash received	1034	1161	- 127	89
Home produced foods 3/	275	319	- 44	86
Total	1309	1480	- 171	88
Expenses				
Feed	77	62	+ 15	124
Crops	89	89	+ 0	100
Automobile	59	18	+ 41	328
Tractor and truck	56	27	+ 29	207
Other machinery	14	13	+ 1	108
Building and land	7	8	- 1	88
Livestock	5	10	- 5	50
Hired labor	84	34	+ 50	247
Other (farm)	91	101	- 10	90
Current farm cash expense	482	362	+ 120	133
Capital goods	151	91	+ 60	164
Debt payments	161	337	- 176	48
Family living expenditures	300	264	+ 36	114
Total cash expended	1094	1054	+ 40	104
Home produced foods 3/	275	319	- 44	86
Total	1369	1373	- 4	100

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 17 families keeping a record of farm products used in the home.

COMPARISON OF ACTUAL AND PLANNED FOR SMALL FARMS
(Table 5 discussed)

These 22 small farms were planned with a larger percentage of the farm receipts from crop sales than were the large farms. The smaller sales of almost all items of income than planned caused the cash farm receipts to be $554. That was $551 less than planned. The current farm cash expense was less than planned because other farm expense was not as large as planned.

The net cash farm income was $115, which was $486 less than planned. Although home produced foods were valued at $263 the family living expense was $317. This $317 could not be met from the net cash farm income; therefore, borrowing and non-farm income were necessary to carry the family expense.

These 22 small farms are either too small for the family to earn a living or some changes need to be made in the farm organization or both. The farm plans indicated a current farm cash expense equal to 46 percent of the cash farm receipts, but the actual farm expense was equal to 79 percent of the farm receipts. The cause of this difference could not be determined from the record books because production of crops and livestock was reported by only a few farmers. Crop yields for farms reported were as high or higher on most field crops than planned. Therefore, livestock production or truck crops yielded extremely low or farmers income from the farm was greatly over-planned if the reported crop yields were representative of all small farms.

Table 5 A comparison of the actual and planned receipts and expenses for 22 small farms in Area 3, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	298	767	- 469	39
Poultry	27	53	- 26	51
Eggs	17	32	- 15	53
Dairy products	17	21	- 4	81
Cattle	31	31	+ 0	100
Hogs	46	86	- 40	54
Other livestock	23	24	- 1	96
Other (farm)	36	11	+ 25	327
AAA payments	59	80	- 21	74
Cash farm receipts	554	1105	- 551	50
Other income	181	135	+ 46	134
Money borrowed	379	364	+ 15	104
Total cash received	1114	1604	- 490	70
Home produced foods 3/	263	283	- 20	93
Total	1377	1887	- 510	73
Expenses				
Feed	72	50	+ 22	144
Crops	136	109	+ 27	125
Automobile	42	29	+ 13	145
Tractor and truck	21	22	- 1	96
Other machinery	18	12	+ 6	150
Building and land	3	5	- 2	60
Livestock	5	9	- 4	56
Hired labor	64	55	+ 9	116
Other (farm)	78	213	- 135	37
Current farm cash expense	439	504	- 65	87
Capital goods	200	196	+ 4	102
Debt payments	209	348	- 139	60
Family living expenditures	317	313	+ 4	101
Total cash expended	1165	1361	- 196	86
Home produced foods 3/	263	283	- 20	93
Total	1428	1644	- 216	87

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 16 families keeping a record of farm products used in the home.

COMPARISON OF ACTUAL AND PLANNED FOR SMALL CROP FARMS
(Table 6 discussed)

Crop sales on those 12 farms was $462; that was $676 less than planned. If the 1940 crop year was average on these farms, crops were given too important a part in the farm business. Five farmers who reported yields of field crops had fair yields in 1940, but they were far below the planned yields for the group. Truck crops produced on a commercial scale would probably have given the return planned but a farmer would need to be above the average low-income farmer in managerial ability to handle such an enterprise.

Cash farm receipts were $633. This was only 45 percent of that shown in the farm plans. Current farm cash expense was $552 or 93 percent of that planned. Non-farm income was less than planned and only $64 was borrowed in excess of what had been planned. Debt payments, family living expenditures and home produced foods were all less than planned, which was caused by smaller cash farm receipts than planned.

How can farmers be rehabilitated when their farm business yields less than 50 percent of the income planned? Too large a part of the farm income was planned from crop sales. This area has all the risks of crop production and cash crops have been undependable sources of revenue. A farm business with sufficient volume to earn a living could be had on these small farms, but more income from dependable sources should be stressed.

In some localities crops probably netted the greatest return of any farm enterprise, but the results from these 12 farms indicated they were not all located in a crop producing locality.

Table 6 A comparison of the actual and planned receipts and expenses for 12 small crop farms in Area 3, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	462	1138	- 676	41
Poultry	5	27	- 22	18
Eggs	2	26	- 24	8
Dairy products	1	0	+ 1	--
Cattle	12	9	+ 3	133
Hogs	20	62	- 42	32
Other livestock	0	5	- 5	--
Other (farm)	40	17	+ 23	235
AAA payments	91	117	- 26	78
Cash farm receipts	633	1401	- 768	45
Other income	151	159	- 8	95
Money borrowed	534	470	+ 64	114
Total cash received	1318	2030	- 712	65
Home produced foods 3/	186	231	- 45	80
Total	1504	2261	- 757	66
Expenses				
Feed	63	50	+ 13	126
Crops	176	120	+ 56	147
Automobile	45	33	+ 12	136
Tractor and truck	33	37	- 4	89
Other machinery	18	14	+ 4	129
Building and land	4	4	+ 0	100
Livestock	2	12	- 10	17
Hired labor	100	93	+ 7	108
Other (farm)	111	282	- 171	39
Current farm cash expense	552	645	- 93	86
Capital goods	269	258	+ 11	104
Debt payments	221	411	- 190	54
Family living expenditures	296	334	- 38	89
Total cash expended	1338	1648	- 310	81
Home produced foods 3/	186	231	- 45	80
Total	1524	1879	- 355	81

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 9 families keeping a record of farm products used in the home.

COMPARISON OF ACTUAL AND PLANNED FOR SMALL LIVESTOCK FARMS
(Table 7 discussed)

These small livestock farmers had the largest net cash farm income of any group; it was $154. Most items of receipts and particularly crop sales were less than planned. Cash farm receipts amounted to $458, but the farm plans showed $750. Items of farm expense were reasonably close to the planned, and the current farm cash expense totaled $304. The net cash farm income was $154, although $415 was planned.

These 10 small livestock farmers had the most favorable net cash farm income because they produced more crop per acre and more livestock products per animal. This group of farmers only lost 4 percent of their baby chicks before they were two months old, averaged 9½ dozen eggs per hen, and sold $0.78 worth of eggs per hen. Two farmers reported over 200 pounds of butterfat per milk cow.

Apparently the production per unit reported for these farms was higher than for the rest of the group because cash receipts from livestock products were quite low for the other farms.

These farmers need to stress production of feed crops and make a greater saving in feed expense. When only enough feed was planned to feed the livestock and the crop yielded less than planned, more feed needed to be purchased. At the same time cash crops were generally yielding less than feed crops, which cut down the farm receipts. If these farmers all had production efficiency as high as the few which reported, these farmers would have had to borrow less and could have made larger debt payments.

Table 7 A comparison of the actual and planned receipts and expenses for 10 small livestock farms in Area 3, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	100	321	- 221	31
Poultry	52	85	- 33	61
Eggs	36	40	- 4	90
Dairy products	37	46	- 9	80
Cattle	54	56	- 2	96
Hogs	76	115	- 39	66
Other livestock	50	48	+ 2	104
Other (farm)	32	4	+ 28	800
AAA payments	21	35	- 14	60
Cash farm receipts	458	750	- 292	61
Other income	217	107	+ 110	203
Money borrowed	194	235	- 41	83
Total cash received	869	1092	- 223	80
Home produced foods 3/	362	351	+ 11	103
Total	1231	1443	- 212	85
Expenses				
Feed	82	50	+ 32	164
Crops	87	96	- 9	91
Automobile	38	24	+ 14	158
Tractor and truck	7	4	+ 3	57
Other machinery	18	10	+ 8	180
Building and land	2	7	- 5	29
Livestock	10	5	+ 5	200
Hired labor	21	8	+ 13	262
Other (farm)	39	131	- 92	30
Current farm cash expense	304	335	- 31	91
Capital goods	117	121	- 4	97
Debt payments	193	272	- 79	71
Family living expenditures	342	286	+ 56	120
Total cash expended	956	1014	- 58	94
Home produced foods 3/	362	351	+ 11	103
Total	1318	1365	- 47	97

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 7 families keeping a record of farm products used in the home.

MONTHLY RECEIPTS AND EXPENSES
(Figure 1 discussed)

These farmers with limited working farm capital were forced to borrow money to carry on their farm business. The input and output of cash for these farmers by months indicated when and how much they needed to borrow and also when and how much repayment could be made.

The small livestock farmers had a relatively even distribution of income and expense for Western New Mexico in 1940. In only four months did farm and home expenses exceed the monthly receipts and only two months, March and April, did farm expenses exceed the monthly receipts. In general, the farmers that have the most uniform monthly expense and receipts have less need to borrow to meet current expenses.

Small crop farmers had six months in which farm and home expenses exceeded the receipts and five months when farm expenses exceeded receipts. This long period during the first half of the calendar year necessitated the borrowing of more money or using more credit than operators of small livestock units. It appeared that this fact was considered because operators of small crop farms were allowed larger loans on their farm plans. The problem for the county FSA supervisors is to determine what enterprises can be added to the individual farm business that will increase the receipts during the first half of the year. Poultry or hogs have prevented this part of the year from being a deficit period on many low income farms, but the enterprises must be properly managed.

Seven months were deficit months on large farms, when cash costs of farming and family living could not be met with current farm receipts. Most of the large farms were livestock farms and the monthly distribution of income and receipts tended to resemble that of small livestock farms. The monthly incomes on large farms were almost the same as on small livestock farms, except in the fall, but more land was classed as crop land on the large farms.

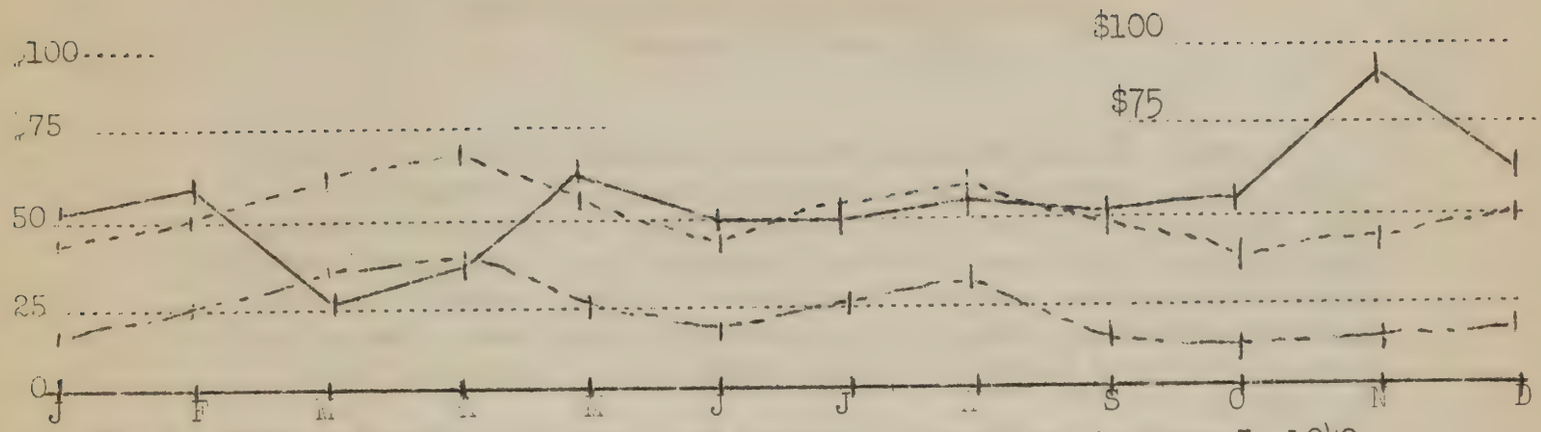
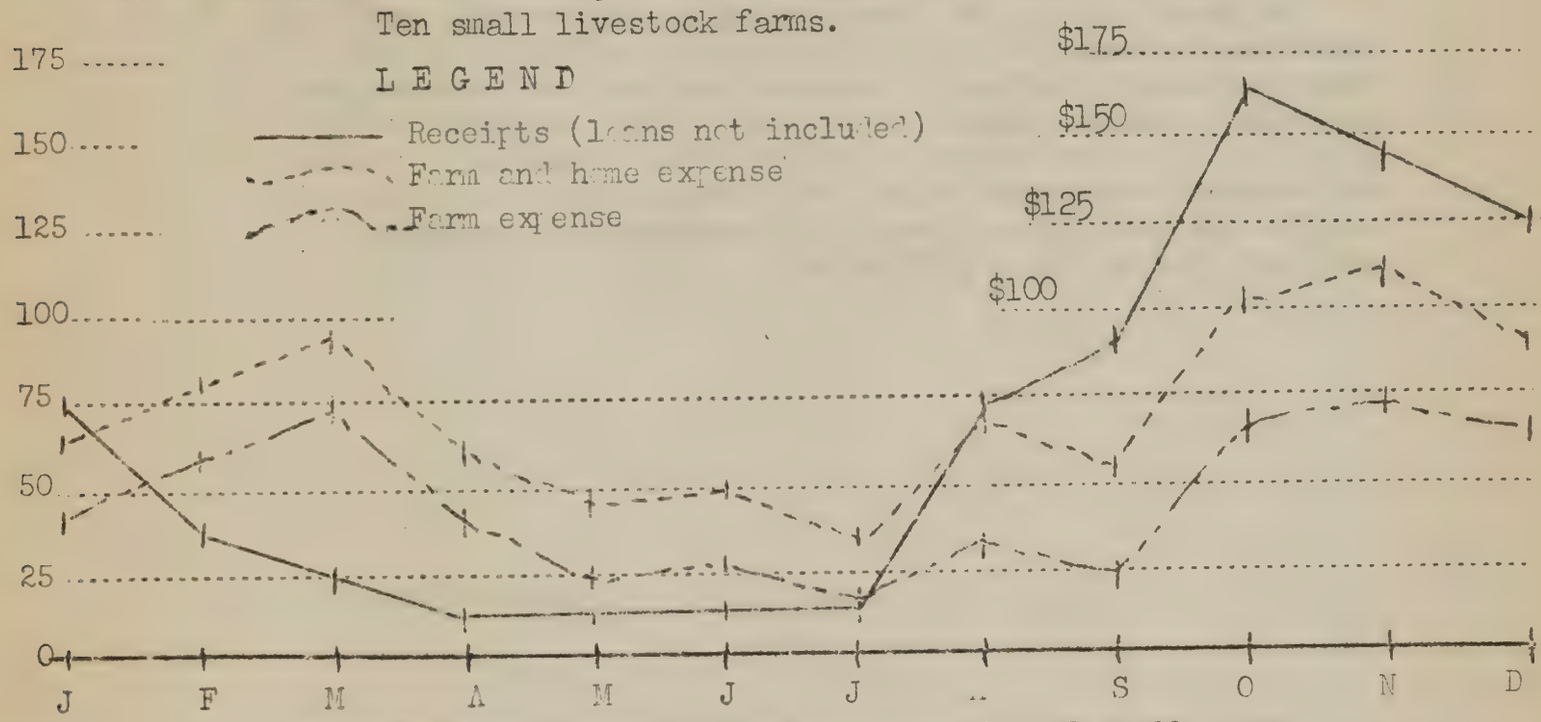
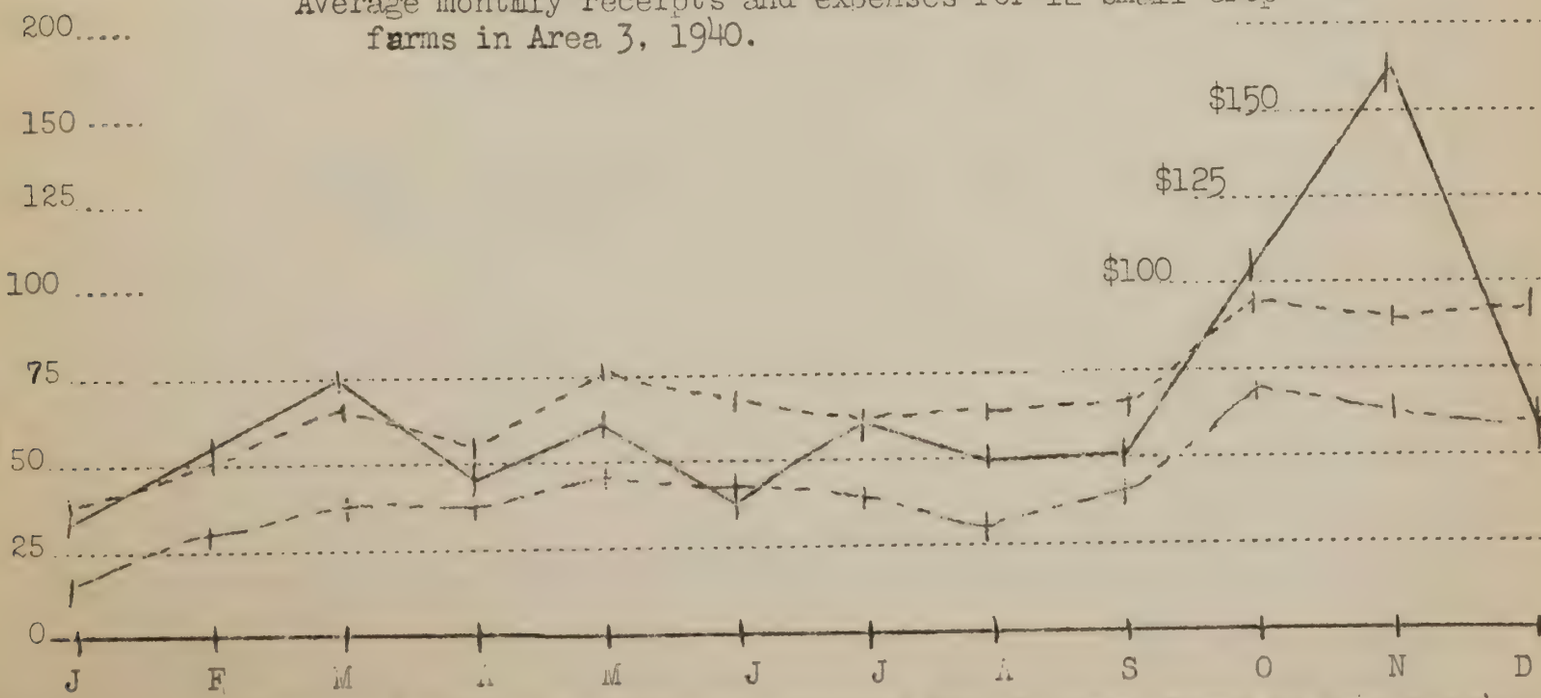


Fig.1. Average monthly receipts and expenses for farms in area 3, 1940.
Ten small livestock farms.



Average monthly receipts and expenses for 12 small crop farms in Area 3, 1940.

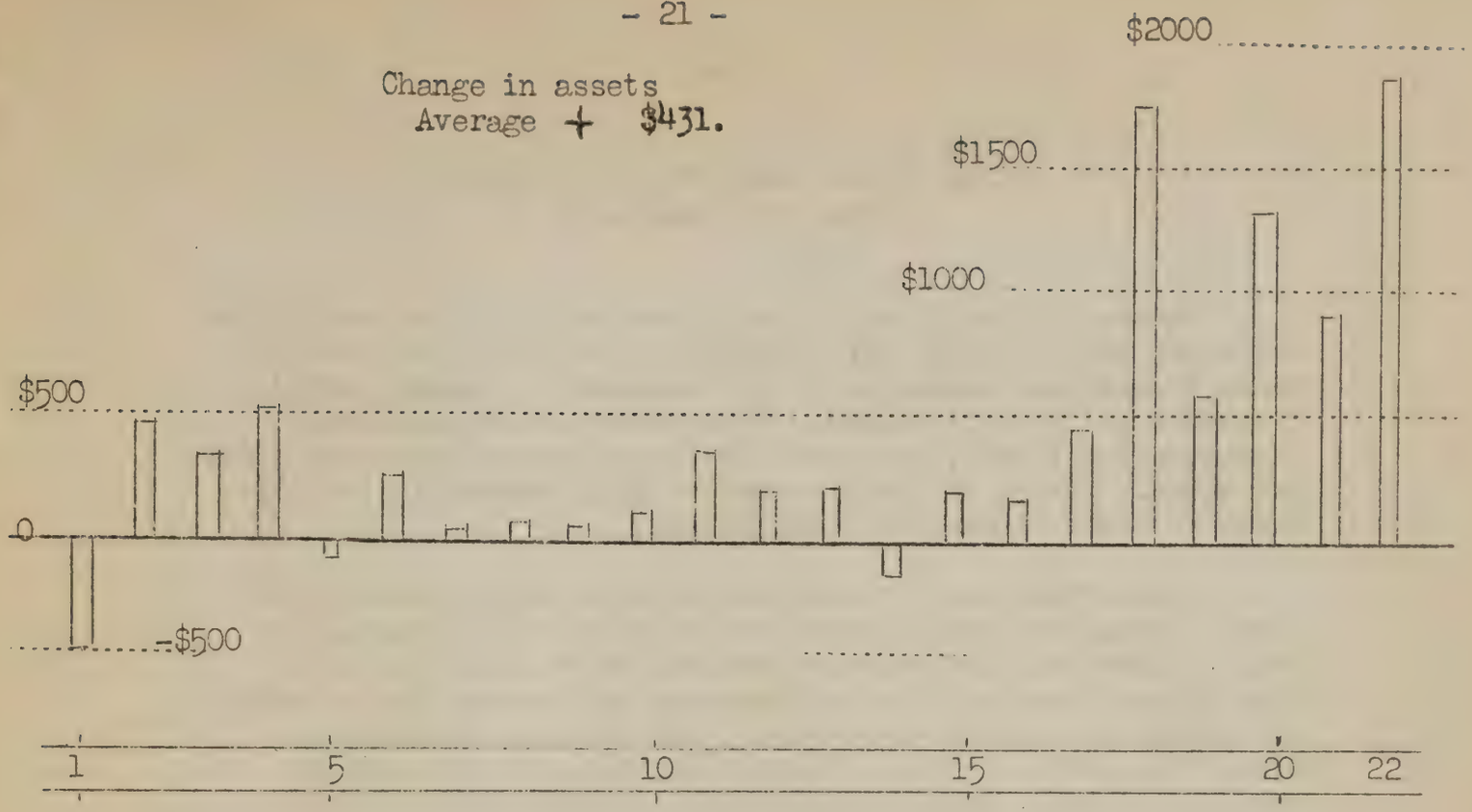


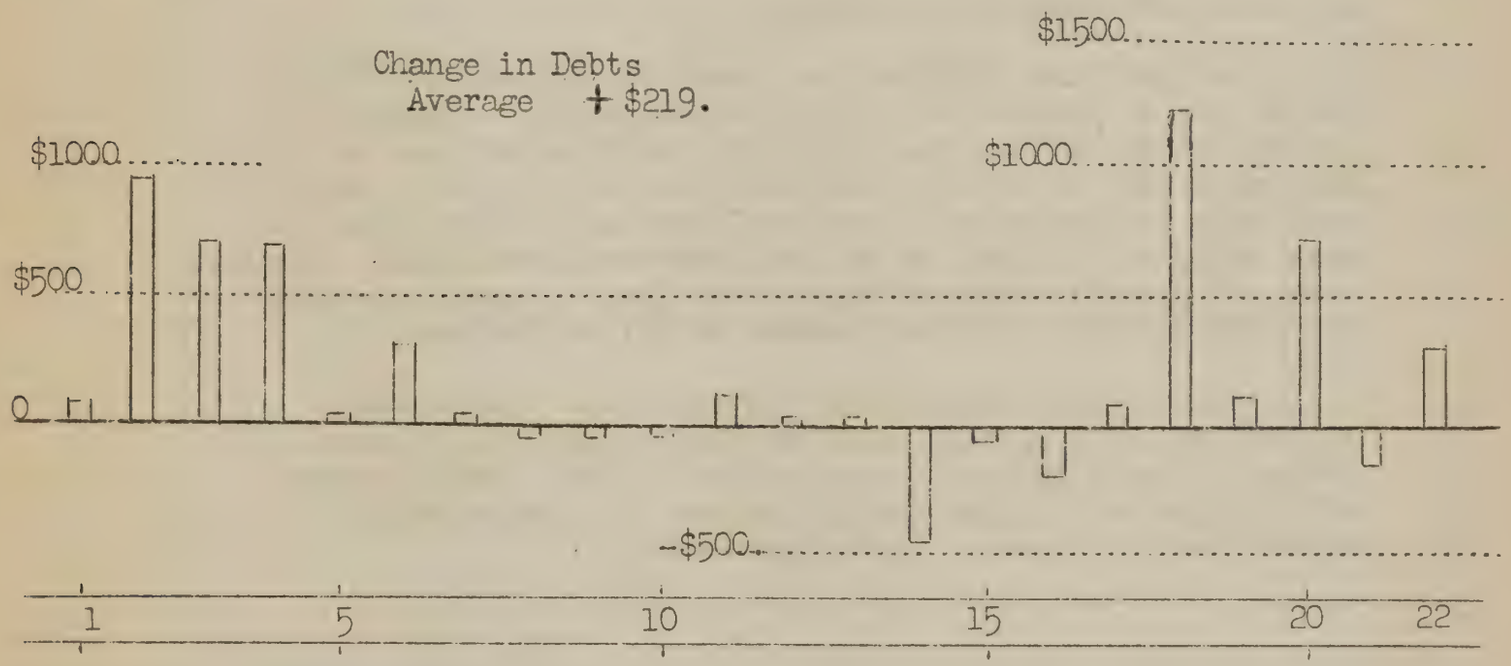
Average monthly receipts and expenses for 17 large farms in Area 3,1940

CHANGE IN NET WORTH FOR SMALL FARMS
(Figure 2 discussed)

Sixteen of the 22 small farmers increased their net worth during 1940. Seven farmers decreased their indebtedness in 1940 and each had increased his net worth. Four of the farmers having large increases in debts decreased their net worth because borrowed money was put into the current family business without the farm producing enough income to repay this loan. Two of the three farms that decreased their assets also decreased their net worth.

A large part of the increased assets was made possible by increased borrowing to buy capital goods, and that did not increase the net worth. If borrowed capital was invested in livestock, was the purchased livestock more productive than indicated by the few farmers who reported livestock production? Building up inventories with low producing livestock does not benefit the low income farmer, but retards or prevents his becoming financially rehabilitated.





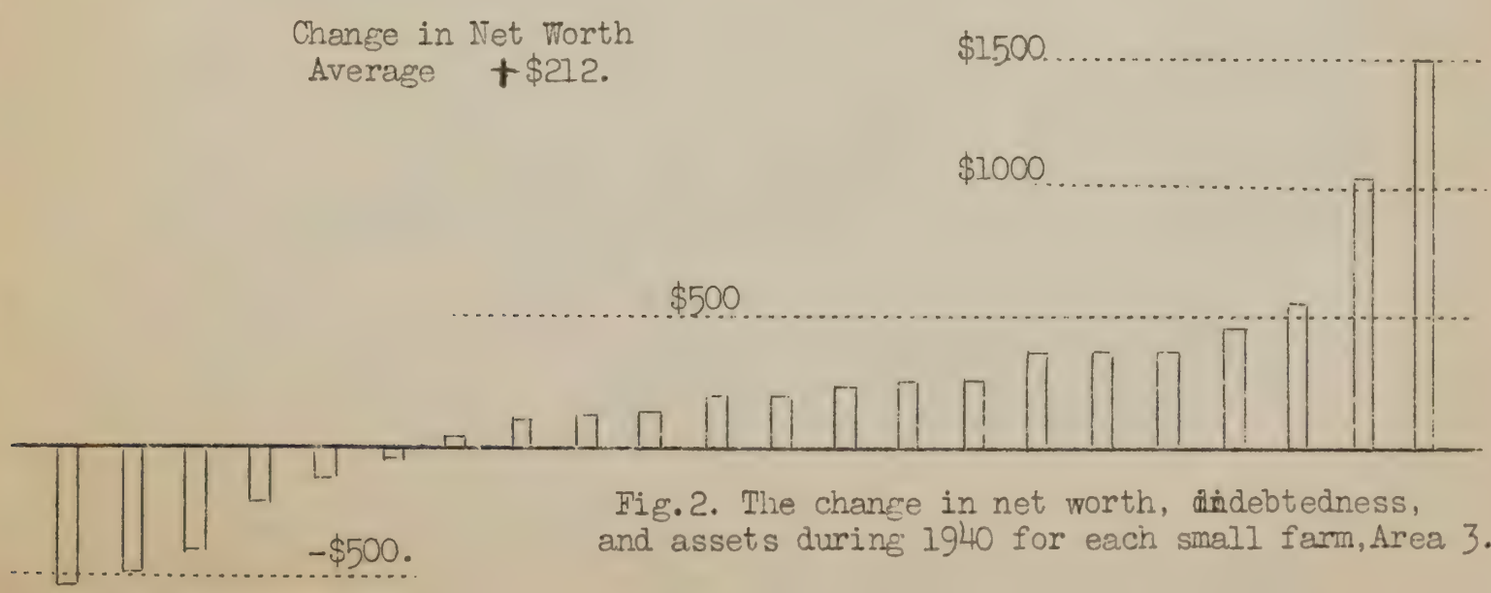


Fig. 2. The change in net worth, indebtedness, and assets during 1940 for each small farm, Area 3.

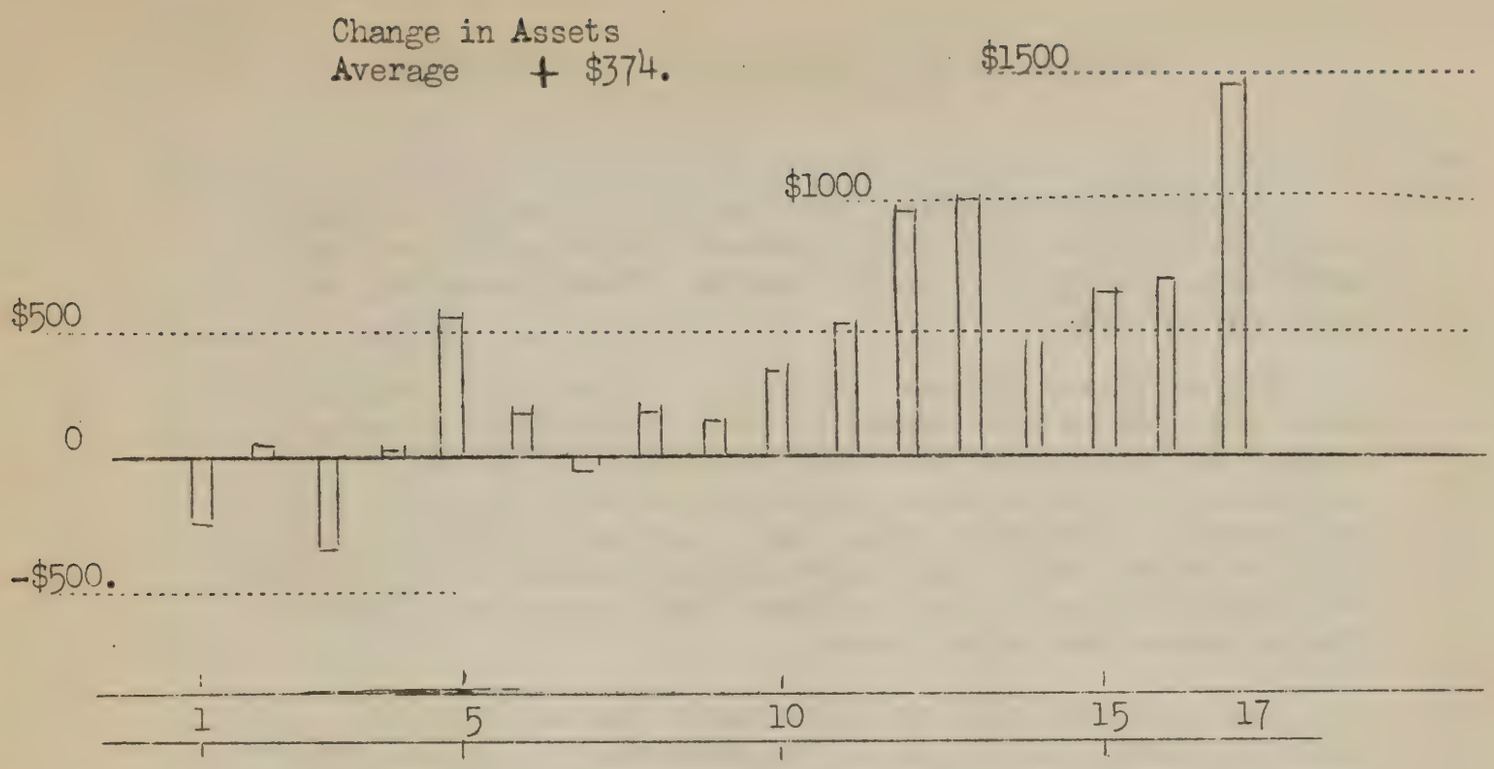
CHANGE IN NET WORTH FOR LARGE FARMS
(Figure 3 discussed)

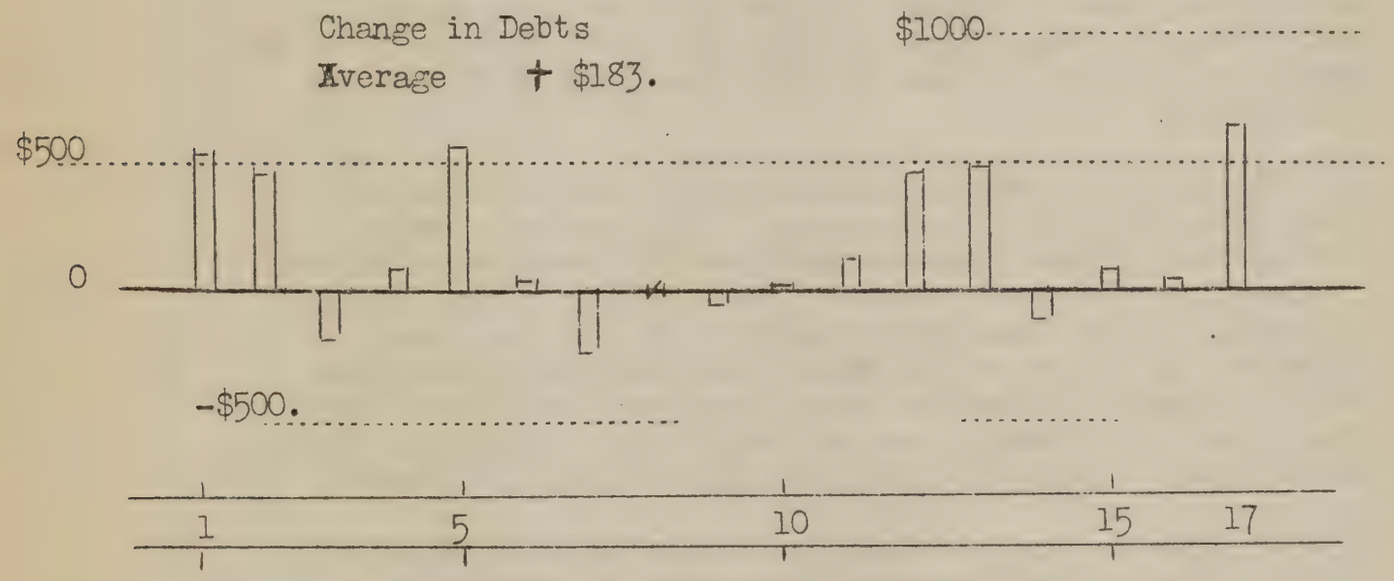
Twelve of the 17 large farm operators had increased their net worth during 1940. The increase in net worth for most of these farmers was caused by large increases in assets, mainly livestock and feed increases. Four farmers decreased their indebtedness in 1940, and three of these farmers increased their net worth. Change of total assets in 1940 showed all but three farms as having increased their assets.

Most of the large farms did not have enough livestock to earn a living and this forced them to depend on production of crops. Increased inventories obtained by keeping back more than enough livestock for replacements has been a slow process and almost impossible where only a few breeding animals were kept. The assets on these farms have increased but prices have, in general, been upward and the farmers have borrowed to obtain the increase in assets.

Two problems confront the county RR Supervisor. First, is it best to stock the farms as needed in the beginning, or should the client be given a few livestock and allowed to build his own herd? It appeared from the farm family record books that many farmers started with small numbers of livestock and were using only a part of the land resources available. Furthermore, it probably has cost the client just as much by borrowing over a period of years instead of all in one year.

Second, what will prices be when these farms become stocked so the operators will be able to sell enough livestock to permit them to decrease their debts? These farmers should have had a large enough business to have earned a living and paid some on their debts in 1940.





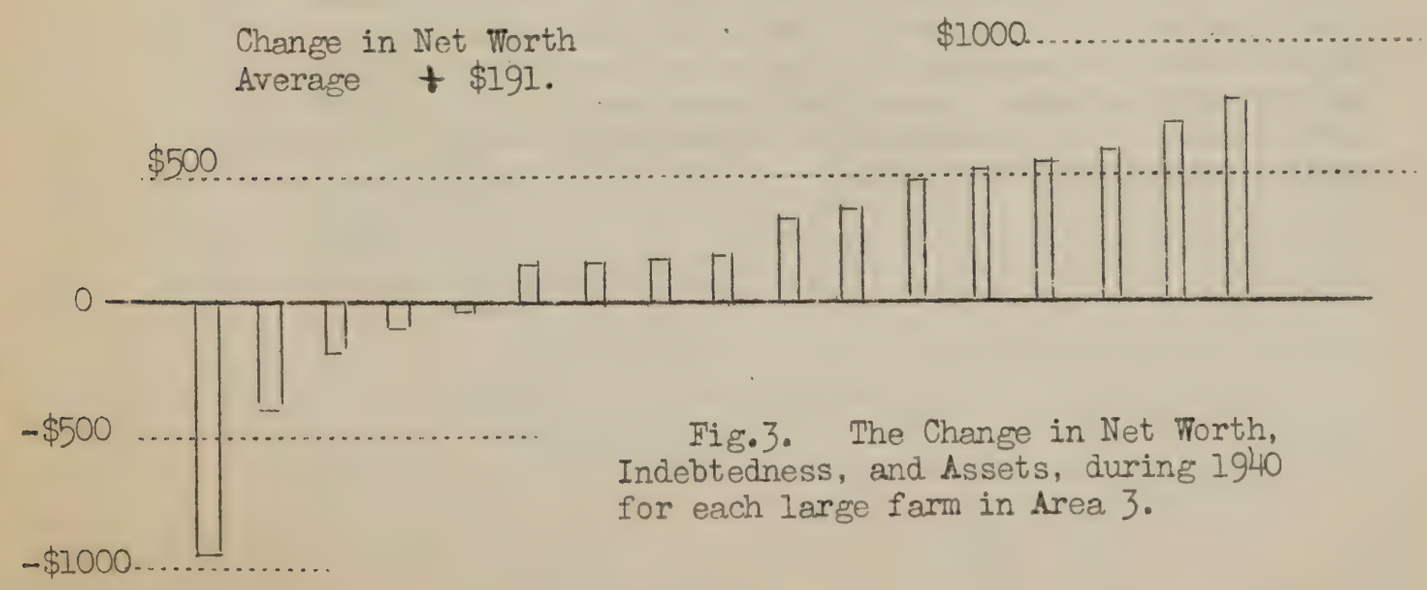


Fig.3. The Change in Net Worth, Indebtedness, and Assets, during 1940 for each large farm in Area 3.

MEASURES OF FARM ORGANIZATION AND EFFICIENCY
(Table 8 discussed)

Because the large farms had the largest acreage of crop land, they had the smallest investment per acre in power and machinery. The group with the next to lowest investment was small crop farms.

All machinery expense was largest on the small crop farms where the farmers were trying to earn a livelihood by raising crops. The net return indicated how futile it was to depend on cash crop in this area. Livestock expense per animal unit was lowest on the large farms, but a larger acreage was available per animal unit. The large expense on each group of farms was caused in part by crop failures that necessitated larger feed expenses than were planned.

The operators of large farms had a greater equity in their property, but they were producing with the least efficiency of any group. This low efficiency was indicated by the farm expense of $59.89 per $100 of gross farm income. Small livestock farms were operated the most efficiently of any group, with a farm expense of only $37.42 per $100 of gross farm income.

Family farm earnings were largest for small livestock farms with small crop farms second. The low farm family earnings on large farms, compared with small farms, indicated that a large farm would not return a profit unless it was managed properly. If the large farms were not stocked to almost capacity, the operators of these farms were using land that could be used by other low income farmers. Production efficiency must be stressed even on large farms because the farmers should earn a living from the farm to become rehabilitated.

If $269 for home produced foods was deducted from the $441 for family farm earnings, $172 would be left for inventory increase and cash living costs. Because of this low return farmers were forced to earn money by working away from the farm and neglected their farm business. If these farms were planned to be part-time farm units, they were, in many cases, managed inefficiently.

Table 8. Measures of Farm Organization and Efficiency of Operation by Size and Type of Farms, 1940, Area 3.

Efficiency and Organization Factors		Small Livestock Farms	Small Crop Farms	All Small Farms	All Large Farms	All Farms
		(Dol.)	(Dol.)	(Dol.)	(Dol.)	(Dol.)
Investment in power per acre of crop land, Jan. 1	1/	5.08	2.91	3.86	1.25	1.84
Investment in machinery per acre of crop land, Jan. 1	2/	4.44	3.58	3.98	.91	1.61
Tractor and truck expense per acre of crop land	3/	.18	.73	.50	.31	.35
All machinery expense per acre of crop land	4/	1.62	2.13	1.93	.71	.99
Total farm expense per $100 gross farm income	5/	37.42	67.13	54.34	59.89	56.67
Livestock expense per livestock unit	6/	9.68	18.06	12.22	7.81	9.75
Debts per $100 farm property Jan. 1		51.62	51.78	51.71	42.41	46.58
Family farm earnings per farm	7/	664.00	374.00	503.00	361.00	441.00
Non-farm income per farm		217.00	151.00	181.00	268.00	219.00
Family farm earnings per acre of crop land		17.03	8.31	11.98	1.98	4.28

1/ Investment in power is the beginning inventory of tractors and work stock.
2/ Value of tractor, truck and automobile not included.
3/ Expense does not include depreciation.
4/ Tractor, truck and automobile expense included, depreciation not included.
5/ Total farm expense includes current farm cash expense, capital goods purchased and decrease in the inventory of farm property. Gross farm income includes cash farm receipts, increase in inventory of farm property, and family living furnished by the farm.
6/ Livestock units are calculated from the beginning inventory of work stock, dairy cows, sows, sheep and hens. Livestock expense includes feed purchased and other livestock expense exclusive of livestock purchased or change in livestock inventory.
7/ Family farm earnings are the cash farm receipts, increase in farm inventory, and the value of home produced foods; less current farm cash expense, capital goods purchased, decrease in farm inventory and five percent interest on operators equity of farm property as of January 1, 1940.

PLANNED AND ACTUAL CASH EXPENDITURES FOR FAMILY LIVING
(Table 9 discussed)

The average actual cash expenditures for all items of family living for all of the families was $18 above that planned. For the small families this figure was $44 and for the large families $1.

Practically all expenditures for items of family living except that of food purchased by the small families and food, and school, church, gifts, recreation and "other" expenditures made by the large families were within $10 over or under the planned expenditures.

For most family living items, the actual expenditures made by the small families exceeded those made by the large families. Of the 15 small families, 4 were Spanish-American and 3 of these lived on large farms. Of the 24 large families, 10 were Spanish-American; only 1 of which lived on a large farm. It would appear then that the data herein presented is somewhat representative of a cross-section of two economies and two modes of living as determined by cultural values peculiar to the Anglos and to the Spanish-Americans. Food expenditures made by the large families were $3 below those made by the small families, and total expenditures were $21 below those made by the small families. The average size of the small families was 3.5 persons and that of the large families 6.7 persons.

Briefly summarized in the following are planning and purchase and production of foods for the table by the families in this study. Values of foods produced 1/ by the families reporting have been interpolated with the cash purchase of foods of all of the families.

	Small families		Large families		All families	
	Planned	Actual	Planned	Actual	Planned	Actual
Total value of food consumed	$358	$369	$458	$437	$418	$409
Home produced	251	227	337	298	302	269
Purchased	107	142	121	139	116	140

An inspection of the summary shows that for the most part what the families (small and large) did not produce in the way of food, they purchased. The small families fell short in their home production by $24 worth of food, but their purchases exceeded plans by $35. For the large families these figures were $39 and $18, respectively.

Plans were for the small-family person to have $1.97 worth of food per week. Actually, he consumed $2.03 worth. It was planned that the large-family person would have $1.31 worth of food per week. He consumed only $1.25 worth. When consumption of food was computed on an adult male equivalent 2/ basis, the small-family adult male consumed food valued at $2.73 and the large-family adult male consumed food valued at $1.83, or a difference of $0.90 per week.

To low-income families this is a sizeable amount and may mean the difference between adequacy and inadequacy of diet, inasmuch as the value of food consumed per consumption unit is not large enough to permit a very great selectivity among foods of different nutritive values.

1/ The farm value of home-produced food is used here.
2/ See Appendix, table 1, Adult male equivalent scale used to weigh food consumption of family members.

Table 9. - PLANNED AND ACTUAL EXPENDITURES FOR ITEMS OF FAMILY LIVING, BY SIZE OF FAMILY, 1940
AREA III 1/

Item	Small families 2/			Large families 2/			All families 2/		
	Plan'	Actual	Difference	Plan'	Actual	Difference	Plan'	Actual	Difference
Food	$107	$142	$ +35	$121	$139	$ +18	$116	$140	$ +24
Clothing	64	58	- 6	75	76	+ 1	71	70	- 1
Personal	19	18	- 1	16	11	- 5	17	13	- 4
Medical	23	30	+ 7	22	20	- 2	21	24	+ 3
Household operation	30	25	- 5	19	17	- 2	24	20	- 4
Minor housing	4	2	- 2	4	4	-	4	3	- 1
Minor furnishings & equip.	10	14	+ 4	12	6	- 6	11	9	- 2
School, church, gifts, recrea.	15	18	+ 3	29	13	-16	23	15	- 8
Life insurance	3	3	-	1	2	+ 1	2	2	-
Other	3	12	+ 9	1	13	+12	2	13	+11
Total	278	322	+44	300	301	+ 1	291	309	+18

1/ Small families: those having less than 5 members. Large families: those having 5 or more members.
2/ Total families 39: Small families 15 : Large families 24 .
Average size of all families 5.5 : Small families 3.5: Large families 6.7.
Average adult male equivalent of all families 3.8: Small families 2.6: Large families 4.6 .

PLANNING PERFORMANCE
(Table 10 discussed)

Table 10 is presented to show how expenditures for family living differed from the planned expenditures. Under-planning occurred among 22 families and over-planning among 17 families.

Under-planning did not tend to concentrate on any particular amount and occurred as frequently in small amounts as in large amounts. Over-planning occurred most frequently in small amounts and for only two families were the planned amounts in excess of $75.

Where small family expenditures were under-planned the average was $127, where over-planned the average was $60. For the large families these two figures were $53 and $86. Two small families under-planned in amounts of $235 and $273 and one large family over-planned in the amount of $384.

If home production of foods had equalled or exceeded the quantities set up in the home plans the average amount of under-planning would have been materially reduced.

Table 10. - ANALYSIS OF HOME PLANNING BY SIZE OF FAMILY, 1940, AREA III 1/

Amount under or over planned	No. of Small Families		No. of Large Families		No. of Families	
	Under planned	Over Planned	Under Planned	Over Planned	Under Planned	Over Planned
$ 1-25	1	5	5	2	6	7
26-50	1	2	3	2	4	4
51-75	2	1	2	3	4	4
76-100	0	0	4	1	4	1
101 & over	3	0	1	1	4	1
Total	7	8	15	9	22	17
Average amount	$127	$27	$53	$86	$77	$58

1/ Small families: those having less than five members. Large families: those having five or more members.

MONTHLY DISTRIBUTION OF EXPENDITURES
(Table 11 discussed)

Family living expenditures of the small families ranged from a low of $20 in January to a high of $35 in November and December. Neither various months nor seasons were equal in their demands for the expenditures of resources for family living. Beginning with January, February and March as the winter season, the percentage distribution of expenditures for various seasons was 23, 22, 24, and 31 percent, respectively. Among the large families this distribution was 23, 23, 27, and 27 percent, respectively. The large families spent the least ($19) in February and in April and the most ($30) in August.

The total expenditure for living by all of the families was lightest during the winter and spring season and heaviest in the summer and fall. Apparently when sales of farm products were being made during the late summer and in the fall and resources were available, purchases of items of family living increased. However as the resources became exhausted during the winter and spring, expenditures for family living dropped perceptibly. The increase in expenditures during late summer and in the fall may be partly attributed to fall and winter needs plus a concentration of education and holiday expense at this time of the year.

Insofar as possible, every effort should be made to stabilize the availability of resources for family living throughout the year. An adequate diet is even more important during the winter and spring when body resistance and likewise availability of vitamins and other essentials are at a minimum, than during that portion of the year when fresh fruits, vegetables, and other body building foods are readily available.

Table 11 - MONTHLY DISTRIBUTION OF FAMILY LIVING EXPENDITURES, BY SIZE OF FAMILY, Area 3, 1940 1/

Month	Small Families (Amount)	Large families (Amount)	All families (Amount)
January	$20	$24	$23
February	29	19	23
March	25	25	25
April	25	19	21
May	24	27	26
June	23	25	24
July	23	22	22
August	29	30	30
September	26	29	28
October	28	28	28
November	35	26	29
December	35	27	30
Total	322	301	309

1/ Small families: those having less than five members.
Large families: those having five or more members.

HOME PRODUCED FOODS
(Table 12 discussed)

Planning the consumption of different items produced on the farm proved to be the most accurately done among the livestock and livestock products items. Actual production and consumption of these items was within 10 percent of the planned performance. In the case of garden products, the performance was within 25 percent of that planned. Production of garden products always entails the risk of unfavorable weather conditions and secondly farm families as a rule are not as cognizant of the value of products for the table from the plant kingdom. Neither are the families as apt to keep accurate records on items which are obtained from the garden only as needed for each meal.

Among the small families, 15 percent of the total value of home produced foods came from the garden, and among the large families this was 13 percent.

Inasmuch as the total values of food planned for and consumed by the large family person, were low 1/ (page 26) it would appear expedient to set the planning "benchmark" of home produced food considerably higher and at the same time place stronger emphasis on a well rounded "live at home" program.

The total value of food purchased and produced 2/ by the small families was $369. If all the food used had been purchased the cost would have been $516. For the large families the former figure was $437 and the latter $641. If the additional expenditures had been necessary, expenditures for other items of family living, farm operating expense, and capital goods investment would have necessitated reduction.

When computed on the basis of farm value of home produced food, the small families planned and produced 70 and 62 percent, respectively, of their total value of family living. For the large families, these figures were 74 and 68 percent. The planning and performance is still some short of the 75 percent home production "benchmark" being advocated by the Farm Security Administration.

1/ Based on January to October 1938 price levels, the Bureau of Home Economics estimates that $1.25 worth of food per person per week can only be considered as an economical fair diet.

2/ The farm value of home produced food is used here.

Table 12. - SUMMARY OF HOME-PRODUCED FOODS PLANNED AND USED BY THE FAMILY, BY SIZE OF FAMILY, 1940, AREA III 1/

	Unit	Small families 2/				Large families 2/				All families 2/			
		Plan'	Used	Farm value	Retail value	Plan'	Used	Farm value	Retail value	Plan'	Used	Farm value	Retail value
Milk	gal.	434	369	$81	$155	550	586	$129	$246	500	494	$109	$207
Cheese	lb.	31	17	3	4	53	34	6	9	43	27	5	7
Butter	lb.	91	57	14	18	105	81	20	26	99	71	18	23
Cream	gal.	1	18	22	32	3	25	30	45	2	22	26	40
Lard	lb.	118	110	11	16	192	116	12	17	161	114	11	17
Pork	lb.	173	150	20	30	199	140	18	28	188	144	19	29
Beef	lb.	114	94	13	22	162	57	8	13	142	73	10	17
Mutton	lb.	27	29	3	6	22	39	5	9	24	35	4	8
Fish	lb.	7	6	1	2	7	15	2	4	7	11	2	3
Poultry	lb.	65	44	8	11	69	54	10	13	68	50	10	12
Eggs	doz.	113	88	17	22	138	99	19	25	128	94	18	24
Beans and nuts	lb.	78	51	2	3	110	87	3	4	96	72	2	3
Tomatoes	lb.	230	150	4	9	300	300	9	18	270	236	8	14
Leafy green vegetables	lb.	375	250	8	10	400	325	10	13	389	293	9	12
Other vegetables	lb.	650	450	9	18	550	350	7	14	592	392	8	16
Fruit	lb.	50	300	9	12	300	50	2	2	194	156	4	6
Potatoes	lb.	180	120	1	2	180	180	2	4	180	155	2	3
Sweet Potatoes	lb.	55	55	1	2	330	55	1	2	213	55	1	2
Flour	lb.	43	-	-	-	235	161	2	5	153	49	1	2
Cereal	lb.	4	4	-	-	35	13	-	1	22	9	-	1
Meal	lb.	17	2	-	-	47	42	1	2	34	25	1	1
Syrup, sorghum & honey	qt.	-	-	-	-	25	8	2	2	14	4	1	1
Total		xx	xx	227 3/	374	xx	xx	298 3/	502	xx	xx	269 3/	448

1/ Small families: those having less than five members.
Large families: those having five or more members.

2/ Total families reporting 33 : Small families 14 : Large families 19 .
3/ Farm value of home produced foods planned by all families $302, Small families $251, Large families $337.

CONSERVED FOODS
(Table 13 discussed)

An average of 213 quarts of fruits, vegetables, and meats were carried over from the previous year. Meats made up the smallest portion of this (10 quarts).

Both large and small families fell short of their planned conservation of fruits and vegetables but they exceeded their plans in the preparation of jams, jellies, pickles, and kraut as well as in the preparation of smoked and salted meats.

Plans that the small families made exceeded by 70 quarts their actual conservation of food stuffs. Among the large families the plans exceeded actual conservation by 60 quarts. The greatest differences between planning and conservation occurred in the items of tomatoes and vegetables.

The quantity of foodstuffs carried over from the previous year by the families is hardly adequate unless supplemented by a considerable supply of dried and stored foodstuffs. Neither is this quantity adequate to carry over for an additional 12 months if it becomes impossible for the families to do any conserving because of drought or other adverse conditions.

Table 13. - SUMMARY OF CANNING ACTIVITY, BY SIZE OF FAMILY, 1940, AREA III 1/

	Unit	Small families 2/			Large families 2/			All families 2/		
		On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.
Canned:										
Tomatoes	qt.	41	106	55	17	83	37	27	93	45
Vegetables	qt.	74	169	100	86	197	174	80	184	142
Fruit	qt.	64	130	126	94	181	161	81	159	146
Fruit juice	qt.	1	1	4	5	0	7	3	1	5
Meat	qt.	8	24	27	12	31	16	10	28	27
Jams & jellies	qt.	6	3	32	4	3	20	5	3	25
Pickles	qt.	6	1	18	4	2	17	5	1	17
Kraut	qt.	2	0	2	2	0	5	2	0	3
Total	qt.	202	434	364	224	497	437	213	469	410
Smoked & salted meat	lb.	2	0	51	50	72	106	29	41	82

1/ Small families: those having less than five members. Large families: those having five or more members.

2/ Total families reporting 32 : Small families 14 : Large families 18.

HOUSEHOLD INVENTORY
(Table 14 discussed)

The value of the household inventory of the small families exceeded that of the large families by $15. The value of the clothing of the former exceeded that of the latter by $11.

For a number of items the small families reported larger inventories than did the large families. These were double mattresses, blankets, davenports, chests of drawers, easy rockers, cupboards, radios, floor coverings, and fruit jars. It is possible that nationality distribution making up the large and small families accounted for some of these differences inasmuch as a greater proportion of the large families were Spanish American. Generally speaking their household inventory in proportion to size of family generally consists of fewer items.

Quite obviously the large families have insufficient beds, bedding, straight chairs, and floor coverings, with which to make their homes comfortable. Too, their supply of fruit jars would appear to be inadequate to carry on a very extensive canning program. One out of two small families and one out of five large families reported a radio. One out of five families reported a refrigerator. Four out of five families reported sewing machines and pressure cookers.

It would seem that from the standpoint of health and comfort, certain additional items should be placed in the homes of the large families. However, needs are not absolute but are determined by the peculiarities of economic adjustment and the traditionally imposed style of living, particularly as found among the Spanish American families.

Table 14 - INVENTORY OF HOUSEHOLD ITEMS, BY SIZE OF FAMILY, 1940
AREA III, 1/

Item	Small families 2/	Large families 2/	All families 2/
Single beds	.3	.5	.5
Double beds	2.0	2.1	2.2
Single mattresses	.3	.5	.5
Double mattresses	2.3	2.0	2.3
Blankets, etc.	2.9	2.0	2.5
Comforts & quilts	7.1	7.4	7.9
Davenport or couch	.3	.2	.3
Chest of drawers	1.0	.8	.9
Straight chairs	3.0	3.8	3.7
Easy rockers	1.3	.8	1.1
Dining tables	.9	1.0	1.0
Other tables	.6	.8	.8
Cupboards	.7	.6	.7
Radios	.5	.2	.4
Rugs	.9	.8	.9
Linoleums	1.1	.3	.7
Regrigerators	.2	.2	.2
Sewing machines	.7	.8	.8
Pressure cookers	.7	.8	.8
Jars	274	173	230
Value of clothing	$48	$37	$45
Value of household inventory	$297	$282	$288

1/ Small families: those having less than five members.
Large families: those having five or more members

2/ Total families reporting 36 : small families 14 : large families 22 .

APPENDIX

Table 1. - CONSUMPTION UNIT SCALE

Age in years	Child	Weight in Terms of Adult Male	
		Boy or Man	Girl or Woman
1.	.4		
2.	.5		
3.	.55		
4.	.6		
5.	.65		
6.	.75		
7.	.75		
8.	.8		
9.	.8		
10.	.85		
11.		.95	.85
12.		.95	.95
13.		1.0	1.0
14.		1.0	.95
15.		1.05	.9
16.		1.15	.85
18 to 59		1.1	.85
60 and over		1.0	.9

Adopted from scale of weighing food consumption published by E. L. Kirkpatrick, Rosalind Tough and May L. Cowles in "How Farm Families Meet the Emergency," Wisconsin Agricultural Experiment Bulletin 126.

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FARM SECURITY ADMINISTRATION

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BUREAU OF AGRICULTURAL ECONOMICS

An Analysis of Farm and Home Plans and Record Books on 170 FSA Farms in the Cotton Area of FSA Region XII in Texas, 1940

Counties

Andrews	Donley	Lamb
Bailey	Ector	Lubbock
Borden	Floyd	Lynn
Childress	Gaines	Martin
Cochran	Glasscock	Midland
Collingsworth	Hale	Motley
Cottle	Hall	Terry
Dawson	Hockley	Yoakum
	Howard	

Amarillo, Texas

October, 1941

ANALYSIS OF FARM FAMILY RECORD BOOKS FOR AREA 6, 1940

The Farm Security Administration, Region 12, and the Division of Farm Management and Costs and the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics, cooperated in the analysis of Farm Family Record Books kept by FSA clients in 1940. Due credit should be given to the farmers who kept these record books and the county FSA personnel who gave the farmers assistance and sent these books to the regional office. All preliminary tabulations and summations from these books were made by Work Projects Administration under Official Project No. 65-2-66-622.

Region 12 of the FSA was divided into six areas, principally on the basis of types of farming. Wherever possible, FSA district boundaries were followed in order that the results of the study would be directly useful to FSA district supervisors. In some cases, two or more districts are combined into one area.

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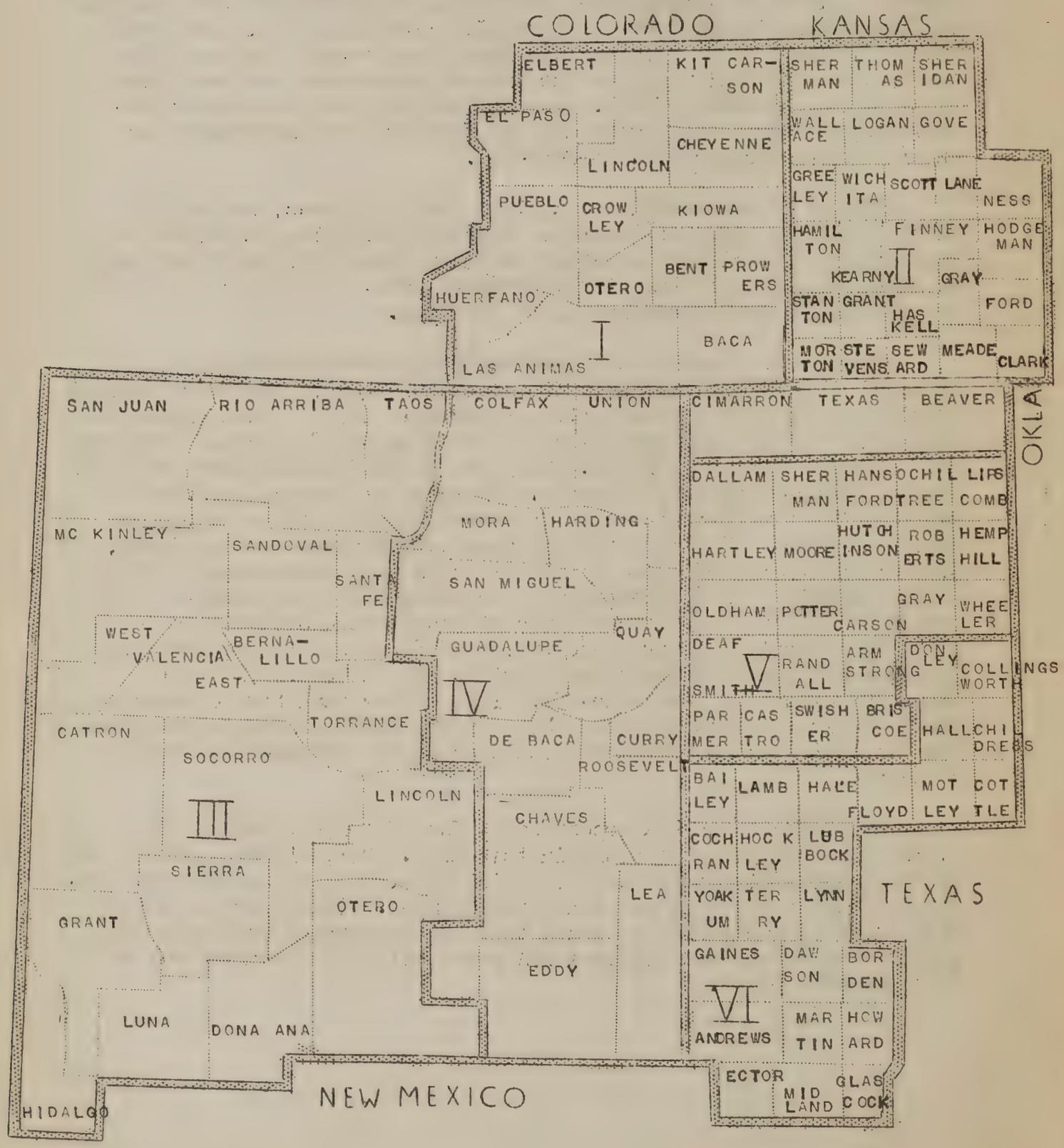
To make the results of these analyses of the greatest use in planning to Farm Security Administration personnel, farms were grouped by size and type of farm and size of family. Size of farm groups were determined within each area, placing about one-half as small farms and the other half as large farms. Only two classifications were made for type of farms--crop and livestock. The type of farm classification was based on the farmer's sales and inventory reportings and on the 1940 farm plans. Farms in this area were predominately crop farms. Size of family is reflected in the planning and consumption behavior of the families, the proportionate expenditures for various items of family living, the amount and kinds of subsistence produced on the farm, the extent of their conservation of foods program and some indication of their household inventories. On the basis of family size, two groupings were made--families of less than five persons and those of five or more persons. Most of the cotton farms in the Texas portion of Region 12 of FSA are included in the twenty-five counties of Area 6.

According to an FSA report dated June 24, 1941, there were 3,412 Farm Family Record Books in this area. Only 419 were sent in to the regional office to be used in this study. Of these, 170 were complete enough for use in the final tabulations. Tables are presented with brief explanatory statements that should furnish assistance and guidance to county and district FSA personnel in the working out of farm and home plans.

ANALYSIS OF FSA RECORDS BY AREAS FOR REGION XII



SUMMARY AND RECOMMENDATIONS

1. Production efficiency must be increased if these farmers meet their financial obligations and become successful. Average yields of crops were 20 to 50 percent less than planned. Production of livestock products per animal was less than 90 percent of the average for Texas. The large expenditures for feed would be justified only with higher rates of livestock production.

2. Power investment for tractor farms per acre of cropland was twice that for horse farms.

3. Farm receipts were 20 percent less, home produced foods 26 percent less and money borrowed 44 percent greater than planned. Plans should be more realistic.

4. Farm expense was 10 percent less than planned on livestock farms and 8 percent more than planned on crop farms. Capital expenditures, which were made up principally of purchases of new equipment and livestock, exceeded the planned requirements for all types and sizes of groups. For all farms these expenditures were 31 percent above the planned. If incomes had exceeded the planned income, one would expect a part of the surplus to be invested in new capital, but since incomes were far below the planned it appears that the equipment needs of these farmers were considerably underestimated. This indicates that county supervisors may not be giving enough attention to the equipment needs of particular types and sizes of farms in making their farm plans. Also, it is possible that more attention should be given to the condition of the equipment on hand at the first of the year so that replacement needs can be ascertained.

5. Receipts and current expenses tended to be more evenly distributed throughout the year on livestock farms than on crop farms with receipts equaling or exceeding current expense during a greater part of the year on livestock farms. Uniformity of income during the year is desirable on low income farms. Larger numbers of good dairy cows and poultry should be an asset on these farms if accompanied with larger production of livestock feeds.

6. Total indebtedness per farm increased in 1940. FSA loans per farm increased considerably, but non-FSA loans decreased approximately $61 on the average. This does not appear to be undesirable except in cases where the repayment of non-FSA debts is made from funds needed for current farm operation or for necessary items of family living. County supervisors should attempt in so far as they are able, to coordinate the non-FSA and FSA debt payment programs of their clients.

7. The combined value of purchased and home produced foods as planned and as actually purchased and produced by the small families indicates that their diet was adequate; while large families produced more food, the planned and actual figures of purchase and production indicate that their diet could only be considered as fair.

8. For three out of ten families, home planning did not seem to have much significance. In four cases out of ten, their planned expenditures were more than $100 below the amount spent.

9. Since cash for food expenditures is not readily available, home production of foods should be greatly encouraged so that the diet available fulfills biological requirements. Even during dry years,

there are available livestock and livestock products. Among these items the large families fell considerably below the goals set by the plans.

10. The food conserving program plans have set some definite "bench marks". The amount of food canned fell short by over a third that planned. Lack of sufficient production to provide for preservation seems to be at fault.

11. Household items possessed by the large families appear to be inadequate, particularly items such as beds, chairs, rockers, rugs, linoleums, and clothing. Items that appear to be inadequate for both large and small families are davenports or couches, cupboards, rugs, refrigerators, sewing machines and possibly radios.

SIZE OF FARMS AND FAMILIES, INVENTORIES OF FEED AND LIVESTOCK (Table 1)

Farms with 160 acres or less were classified as small farms. Small livestock farms had only 18 acres of permanent pasture compared to 120 acres for large livestock farms. The families on large livestock farms had the largest number of adult males, 1.6 per family.

Both the beginning and ending inventories showed more grain on hand for crop farms than for livestock farms. Considering the number of livestock being kept, crop farms had a more adequate supply of roughage than the livestock farms.

The fewest number of work-stock were on large crop farms where tractors were most common (Table 2). The large farms averaged 2.8 head of work-stock compared to 3.0 for small farms. But the large farms had more tractors, 0.3 per farm, compared to 0.2 for small farms. The average value of all work-stock was $49 per head.

Nearly all of the productive livestock on these 170 farms was in subsistence livestock enterprises of which dairying was the most important. Only three farms had over 10 milk cows at the beginning of 1940 and seven farms at the end of the year. Dairy herds were slightly larger on farms with large families. Beef cows averaged 0.3 head per farm for the 170 farms.

None of the farm groups had many hogs. A few sheep were being kept on large crop farms. As many hens were being kept on crop farms as on livestock farms, and averaged 70 per farm for all farms. A comparison of productive livestock units per farm shows that small livestock farms had approximately as many productive livestock as large livestock farms. With less land to tend the operators of small livestock farms were using more livestock to increase the size of farm business, a practice which should be encouraged in this area, within the limits of feed production on individual farms.

Table 1. Acres of land, size of families, and inventories of feed and livestock for farms by size and type in Area 6, 1940.

Item	Unit	Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Number of farms	No.	26.	53.	20.	71.	170.
Cropland	Acre	110.	113.	188.	216.	164.
Permanent Pasture	Acre	15.	18.	120.	44.	40.
Total land in farms	Acre	132.	138.	318.	271.	213.
Persons in the family	No.	4.3	4.8	4.6	4.7	4.7
Adult males 16 yrs. or more	No.	1.3	1.2	1.6	1.4	1.3
Grain						
January 1	BU.	37.	45.	65.	115.	76.
December 31	Bu.	40.	44.	28.	177.	97.
Roughage						
January 1	Ton	5.5	4.8	4.8	9.8	7.0
December 31	Ton	7.8	11.3	12.3	12.3	11.3
Workstock						
January 1	No.	3.0	3.0	3.8	2.5	2.9
January 1	Dol.	48.	145.	197.	123.	142.
Dairy Cows						
January 1	No.	4.3	2.7	4.9	3.2	3.4
December 31	No.	5.8	3.1	6.4	3.8	4.0
Beef Cows						
January 1	No.	0.5	0.3	0.1	0.2	0.3
December 31	No.	0.1	0.2	1.0	0.2	0.3
Sows						
January 1	No.	0.7	0.9	1.0	0.9	0.9
Sheep						
January 1	No.	0.0	0.0	0.0	1.4	0.6
Hens						
January 1	No.	63.	60.	76.	78.	70.
Productive Livestock Units 1/						
January 1		5.6	3.8	6.1	4.6	4.7

1/ Productive livestock units were calculated from the beginning inventory of dairy cows, beef cows, sows, sheep and hens.

INVENTORIES OF FARM PROPERTY, HOUSEHOLD PROPERTY, AND INDEBTEDNESS
(Table 2)

The largest number of tractors per farm and the highest valued tractors were on the large crop farms. The groups of farms having the largest number of tractors per farm also had the largest inventory value of other machinery. The ending inventory of other machinery was 55 cents per acre of cropland for the 170 farms. Four-fifths of the 170 operators owned automobiles.

Thirty-five of the farmers held the title to part or all of the land operated and three of these reported land indebtedness that exceeded the land values. The average size of the 170 farms at the beginning of the year was 213 acres, 35 acres of which was owned. The average value of the owned land was $21 per acre.

The value of farm inventories increased an average of $330 during the year for the groups of farms. The greatest increase in the farm inventory, $527, was on large livestock farms. In Table 1 it was shown that this group of farms increased dairy and beef cows more than any other group.

Indebtedness to FSA increased on all groups of farms during 1940. The average increase per farm was $207. Total indebtedness increased only $146; therefore, of the money loaned to each farmer on FSA, $61 on the average, was used to reduce debts owed to other persons or agencies.

Table 2. Inventories of Farm Property, Household Property, and Indebtedness for Families Grouped According to the Size and Type of Their Farms
Area 6, 1940

Item		Unit	Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Farms		No.	26	53	20	71	170
Tractors	Jan. 1	No.	0.3	0.1	0.2	0.4	0.3
	Jan. 1	Dol.	128	52	110	268	161
	Dec.31	No.	0.3	0.2	0.3	0.7	0.4
	Dec.31	Dol.	180	138	217	444	282
Autos or trucks	Jan. 1	No.	0.9	.8	.7	.7	0.8
	Jan. 1	Dol	99	61	60	99	83
	Dec.31	No.	0.9	0.8	0.6	0.8	0.8
	Dec.31	Dol.	106	71	56	90	83
Other machinery	Jan. 1	Dol.	80	57	81	96	79
	Dec.31	Dol.	108	57	88	110	91
Livestock	Jan. 1	Dol.	455	346	543	414	414
	Dec.31	Dol.	552	387	764	442	479
Feed and supplies	Jan. 1	Dol.	80	173	138	104	126
	Dec.31	Dol.	89	222	101	148	155
Real Estate owned	Jan. 1	Ac.	32	28	69	33	35
	Jan. 1	Dol.	885	870	1337	724	866
	Dec.31	Ac.	33	28	78	35	37
	Dec.31	Dol.	954	993	1570	787	969
Total farm inventory	Jan. 1	Dol.	1727	1559	2269	1705	1729
	Dec.31	Dol.	1989	1868	2796	2021	2059
Household inventory	Jan. 1	Dol.	236	248	234	294	264
	Dec.31	Dol.	271	275	260	332	296
Cash, savings, and accounts due	Jan. 1	Dol.	80	111	49	144	113
	Dec.31	Dol.	74	92	26	108	89
Total Assets 1/	Jan. 1	Dol.	2043	1918	2552	2143	2106
	Dec.31	Dol.	2334	2235	3082	2461	2444
Indebtedness to FSA	Jan. 1	Dol.	358	370	643	444	431
	Dec.31	Dol.	647	554	1004	594	638
Total Indebtedness 2/	Jan. 1	Dol.	1316	1232	1144	1067	1166
	Dec.31	Dol.	1468	1411	1497	1129	1312

1/ Includes real estate owned.
2/ Includes real estate mortgages on real estate owned.

CASH RECEIPTS AND EXPENSES, ALL FARMS
(Table 3)

Table 3 is an average of the 170 farms summarized for area 6. Total cash farm receipts were $238 less than planned. The major source of income was from crops, yet little information was reported to indicate why crop receipts were low. Twenty-three of the 170 books contained crop production records. For these records, the actual yield of cotton was 50 percent of the planned. The planned wheat yield was 10.6 bushels, actual 8.9 bushels; planned grain sorghum yield, 13.2 bushels, actual, 10.9 bushels; planned forage sorghum yield, 0.8 ton, actual, 0.5 ton.

Actual egg receipts were 53 cents per hen. Twenty operators reporting on chicks raised had lost 32 percent of their chicks before the chicks were two months old. Dairy products sold averaged $30.81 per dairy cow. The average butterfat production for 11 farms reporting this information was 130 pounds per cow. Hog receipts were $30 per farm which averaged $33 per sow on hand at the beginning of the year. Ten farmers reporting on pigs produced had an average of five pigs per litter. Too few of the farmers reported butterfat per cow, pigs per litter, or chicks raised to give reliable averages for each group of farms.

Actual farm expense items were slightly more than planned in most cases except crop expense. Total planned current farm cash expense was 4 percent lower than actual. Actual current farm cash expense of $600 was $3.65 per acre of cropland. Cash net farm income, which is the difference between cash farm receipts and current cash farm expense was $355. This was only 89 percent of the family living expense, and $259 less than was planned. These families secured additional cash from loans, and other income, which included grants and work off the farm. They also had other cash expenditures including the purchase of capital goods and payment of debts.

The actual total cash expended for all purposes including family living was $1776 per family, $46 in excess of the total cash received during the year.

It appears that the planning of crop production should be given more attention. Failure to produce the planned amount of crops is generally accompanied by livestock sales which are far below the planned or by feed purchases in excess of the planned, or both.

Table 3 A comparison of the actual and planned receipts and expenses for 170 farms in Area 6, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	$469	$618	- 149	76
Poultry	13	24	- 11	54
Eggs	37	50	- 13	74
Dairy Products	114	123	- 9	93
Cattle	39	52	- 13	75
Hogs	30	50	- 20	60
Other livestock	13	24	- 11	54
Other (farm)	49	33	+ 16	148
AAA payments	191	219	- 28	87
Cash farm receipts	955	1193	- 238	80
Other income	172	120	+ 52	143
Money borrowed	603	419	+ 184	144
Total cash received	1730	1732	- 2	100
Home produced foods 3/	271	366	- 95	74
Total	2001	2098	- 97	95
Expenses				
Feed	$112	$119	- 7	94
Crops	119	171	- 52	70
Automobile	80	49	+ 31	163
Tractor and truck	72	43	+ 29	167
Other machinery	25	21	+ 4	119
Building and land	5	3	+ 2	167
Livestock	10	11	- 1	91
Hired labor	107	93	+ 14	115
Other (farm)	70	69	+ 1	101
Current farm cash expense	600	579	+ 21	104
Capital goods	375	286	+ 89	131
Debt payments	404	406	- 2	100
Family living expenditures	397	361	+ 36	110
Total cash expended	1776	1632	+ 144	109
Home produced foods 3/	271	366	- 95	74
Total	2047	1998	+ 49	102

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 114 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR SMALL LIVESTOCK FARMS
(Table 4)

Small livestock farms were more successful than large livestock farms but below the crop farms as measured by family farm earnings. The net worth of families on small livestock farms increased an average of $139 and they earned $186 off the farm. Their low income for 1940 is partly explained in Table 4. Receipts from crops were only 45 percent of the planned and all cash farm receipts 78 percent of the planned. Fifteen percent of these farms had higher farm receipts than planned which was largely from other farm income.

Small livestock farms made a good showing with dairy products and eggs sold, compared to the other groups, but these enterprises were too small to overcome the poor results obtained with crops. The dairy products sold averaged $38.50 per dairy cow, and eggs sold averaged 67 cents per hen. To make up the deficiency in income from the farm it was necessary for the operators to borrow $614 per farm when only $280 was planned.

All actual cash farm expense items were slightly more than planned except expenses for crops, hired labor, and other farm expense. Thirty-eight percent of the farms had farm expenses that were less than planned which can be attributed principally to lower crop expense and hired labor than planned. Cash net farm income was actually $293 or $214 less than planned.

Table 4 A comparison of the actual and planned receipts and expenses for 26 small livestock farms in Area 6, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	$181	$405	- 224	45
Poultry	18	28	- 10	64
Eggs	37	50	- [illegible]	64
Dairy products	194	165	29	118
Cattle	50	85	- 35	59
Hogs	28	27	1	104
Other livestock	32	37	- 5	86
Other (farm)	66	18	48	367
AAA payments	155	172	- 17	88
Cash farm receipts	766	987	- 221	78
Other Income	186	113	73	165
Money borrowed	614	280	334	219
Total cash received	1566	1380	186	114
Home produced foods 3/	210	390	- 180	54
Total	1776	1770	+ 6	100
Expenses				
Feed	$167	$152	15	110
Crops	70	100	- 30	70
Automobile	82	44	38	186
Tractor and truck	28	15	13	187
Other machinery	26	21	5	124
Building and land	7	5	2	140
Livestock	13	9	4	144
Hired labor	36	76	- 40	47
Other (farm)	44	58	- 14	76
Current farm cash expense	473	480	- 7	98
Capital goods	331	209	122	158
Debt payments	348	319	29	109
Family living expenditures	382	346	36	110
Total cash expended	1534	1354	180	113
Home produced foods 3/	210	390	- 180	54
Total	1744	1744	0	100

1/ Actual minus the planned
2/ Planned = 100 percent.
3/ An average of 21 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR SMALL CROP FARMS
(Table 5)

Small crop farms were slightly less successful than the large crop farms but considerably more successful than either group of the livestock farms as measured by family farm earnings. Receipts from crops were 88 percent of the planned compared to 45 percent for the small livestock farms. All cash farm receipts were 87 percent of the planned. Twenty-eight percent of these 53 farmers had higher cash farm receipts than planned, caused by larger income from crops and government payments than planned. Eggs sold averaged 38 cents per hen and $23.28 of dairy products were sold per dairy cow.

Items of actual farm expense were not greatly different from those planned. All current farm cash expense was $37 more than planned, compared to $56 more than planned for large crop farms. The 24 farmers with smaller current farm cash expenses than planned spent considerably less for crop expense and hired labor than planned. The actual amount spent for capital goods was 74 percent more than planned. Cash net farm income was actually $313 but the farm plans showed $467; this difference of $154 was the smallest of the four groups of farms.

Table 5 A comparison of the actual and planned receipts and expenses for 53 small crop farms in Area 6, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	$448	$512	- 64	88
Poultry	12	21	- 9	57
Eggs	23	31	- 8	74
Dairy products	67	77	- 10	87
Cattle	32	36	- 4	89
Hogs	20	40	- 20	50
Other livestock	14	11	3	127
Other (farm)	23	26	- 3	88
AAA payments	171	173	- 2	99
Cash farm receipts	810	927	- 117	87
Other income	190	118	72	161
Money borrowed	478	340	138	141
Total cash received	1478	1385	93	107
Home produced foods 3/	279	368	- 89	76
Total	1757	1753	4	100
Expenses				
Feed	$ 96	$112	- 16	86
Crops	102	147	- 45	69
Automobile	74	31	43	239
Tractor and truck	37	21	16	176
Other machinery	16	15	1	107
Building and land	5	2	3	250
Livestock	9	7	2	129
Hired labor	95	60	35	158
Other (farm)	63	65	- 2	97
Current farm cash expense	497	460	37	108
Capital goods	280	161	119	174
Debt payments	326	329	- 3	99
Family living expenditures	395	358	37	110
Total cash expended	1498	1308	190	114
Home Produced foods 3/	279	368	- 89	76
Total	1777	1676	101	106

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 36 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR LARGE LIVESTOCK FARMS
(Table 6)

Large livestock farms had the smallest family farm earnings of any group in area 6 in 1940. However, the $225 earned off the farms was the largest for any group. The average increase in net worth for families on large livestock farms was $177.

As was the case with small livestock farms, the principal difficulty with the 1940 business was that crop receipts were far below the planned. When crop production is the foundation of the farm business, it is difficult to understand why it has been given little attention in the records. Only twenty-three of the 170 books contained crop production records that appeared to be fairly accurate. (See discussion of Table 3 for results shown on the 23 crop production records.) Five farmers had larger farm receipts than planned which was caused by larger sales of livestock products and other farm income.

Actual current farm cash expenses were about as planned except for other farm expense which was 31 percent of the planned, and crop expense which was 42 percent of the planned. It is to be expected that crop expense would be less than planned when crop receipts were only 21 percent of the planned. The plans showed a cash net farm income of $648 but the farmers actually made $155, a difference of $493.

Table 6 A comparison of the actual and planned receipts and expenses for 20 large livestock farms in Area 6, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	$109	$519	- 410	21
Poultry	14	37	- 23	38
Eggs	43	60	- 17	72
Dairy Products	216	225	- 9	96
Cattle	37	86	- 49	43
Hogs	27	53	- 26	51
Other Livestock	19	80	- 61	24
Other (farm)	32	4	28	800
AAA payments	179	230	- 51	78
Cash farm receipts	676	1294	- 618	52
Other income	225	168	57	134
Money borrowed	659	401	258	164
Total cash received	1560	1863	- 303	84
Home produced foods 3/	261	350	- 89	75
Total	1821	2213	- 392	82
Expenses				
Feed	196	184	12	106
Crops	63	149	- 86	42
Automobile	72	47	25	153
Tractor and truck	56	39	17	144
Other machinery	19	24	- 5	79
Building and land	3	3	0	100
Livestock	8	9	- 1	89
Hired labor	70	82	- 12	85
Other (farm)	34	109	- 75	31
Current farm cash expense	521	646	- 125	81
Capital goods	507	292	215	174
Debt payments	346	391	- 45	88
Family living expenditures	387	393	- 6	98
Total cash expended	1761	1722	39	102
Home produced foods 3/	261	350	- 90	75
Total	2022	2072	- 51	98

1/ Actual minus the planned.
2/ Planned =100 percent.
3/ An average of 16 families keeping a record of farm products used in the home.

RECEIPTS AND EXPENSES FOR LARGE CROP FARMS
(Table 7)

Large crop farms were the most successful of all the groups. Their family farm earnings were $617, income from sources outside the farm business was $137, and the increase in net worth was $256. Actual crop receipts were $693 and planned crop receipts $803. One-third of the large crop farmers had larger farm incomes than planned which was attributed to larger crop sales than planned.

Sale of dairy products averaged $26.49 per dairy cow, compared to $40.56 for large livestock farms. Eggs sold averaged 56 cents per hen for both the large crop and the large livestock farms.

Actual farm expense was slightly more than planned, but 42 farms that spent less than planned had lower crop and labor expenses than shown in the plans.

Cash family living expenditures were $407, the highest for any of the groups. Total cash received, including loans, was $2030, compared to $1560 for large livestock farms. The cash balance for the year decreased $38 on large crop farms and $201 on large livestock farms. Cash net farm income was $276 below the $752 planned.

Table 7. A comparison of the actual and planned receipts and expenses for 71 large crop farms in Area 6, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	$ 693	$ 803	- 110	86
Poultry	12	22	- 10	54
Eggs	44	61	- 17	72
Dairy Products	92	114	- 22	81
Cattle	41	41	0	100
Hogs	40	64	- 24	62
Other livestock	5	12	- 7	42
Other (farm)	66	53	13	124
AAA payments	223	266	- 43	84
Cash farm receipts	1216	1436	- 220	85
Other income	138	111	27	124
Money borrowed	676	534	142	127
Total cash received	2030	2081	- 51	98
Home produced foods 3/	295	361	- 66	82
Total	2325	2442	- 117	95
Expenses				
Feed	$ 80	$ 94	- 14	85
Crops	165	221	- 56	75
Automobile	85	65	20	131
Tractor and truck	119	70	49	170
Other machinery	32	25	7	128
Building and land	4	3	1	133
Livestock	10	14	- 4	71
Hired labor	151	127	24	119
Other (farm)	94	65	29	145
Current farm cash expense	740	684	56	108
Capital Goods	423	405	18	104
Debt payments	498	498	0	100
Family living expenditures	407	360	47	113
Total cash expended	2068	1947	121	106
Home produced foods 3/	295	361	- 66	82
Total	2363	2308	+ 55	102

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 41 families keeping a record of farm products used in the home.

MONTHLY TRENDS OF RECEIPTS AND EXPENSES
(Figures 1 and 2)

Size of farm or size of family had little effect on the seasonal trend of receipts and expenses. But a comparison of crop and livestock farms showed important differences (Figures 1 and 2). On crop farms, receipts were usually below farm and home expenses from February to August. Crop farm receipts began increasing in September, reached a peak in October and November and then declined sharply. Receipts for livestock farms were larger than for crop farms in late spring and early summer and approximately equal to current cash expenses in June, July, and August. The livestock farm receipts rose more slowly than crop farm receipts to a seasonal high in October, November, and December.

Farm expenses were more variable than home expenses. Farm expenses increased in late winter and early spring when spring field work was started and livestock feed supplies may have become depleted. A sharp increase in farm expenses accompanied the increase in farm receipts in October and November when crops were being harvested or marketed.

Family living expenditures varied but little during the first eight months of the year. With the beginning of school, with winter needs for clothing and fuel, and with the advent of the holiday season, expenditures were found to increase perceptably.

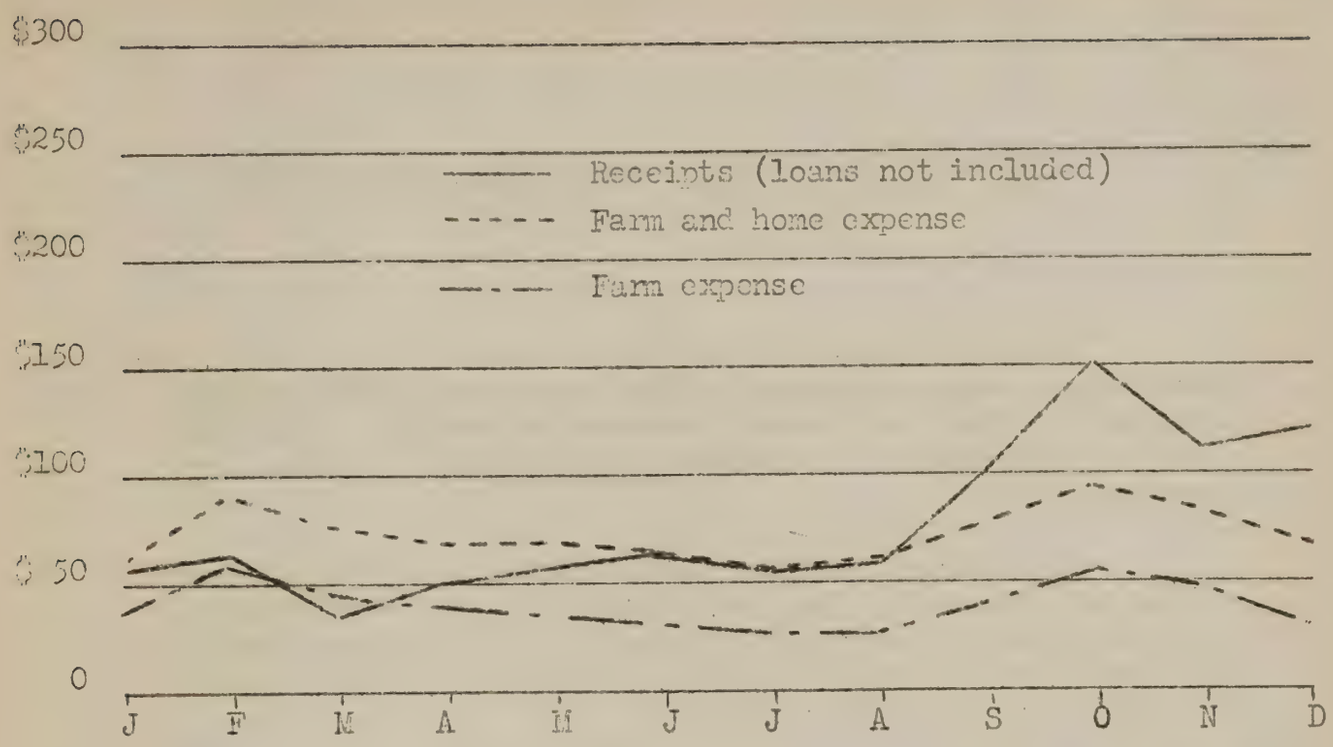


Fig. 1. Average monthly receipts and expenses for 46 livestock farms in Area 6, 1940.

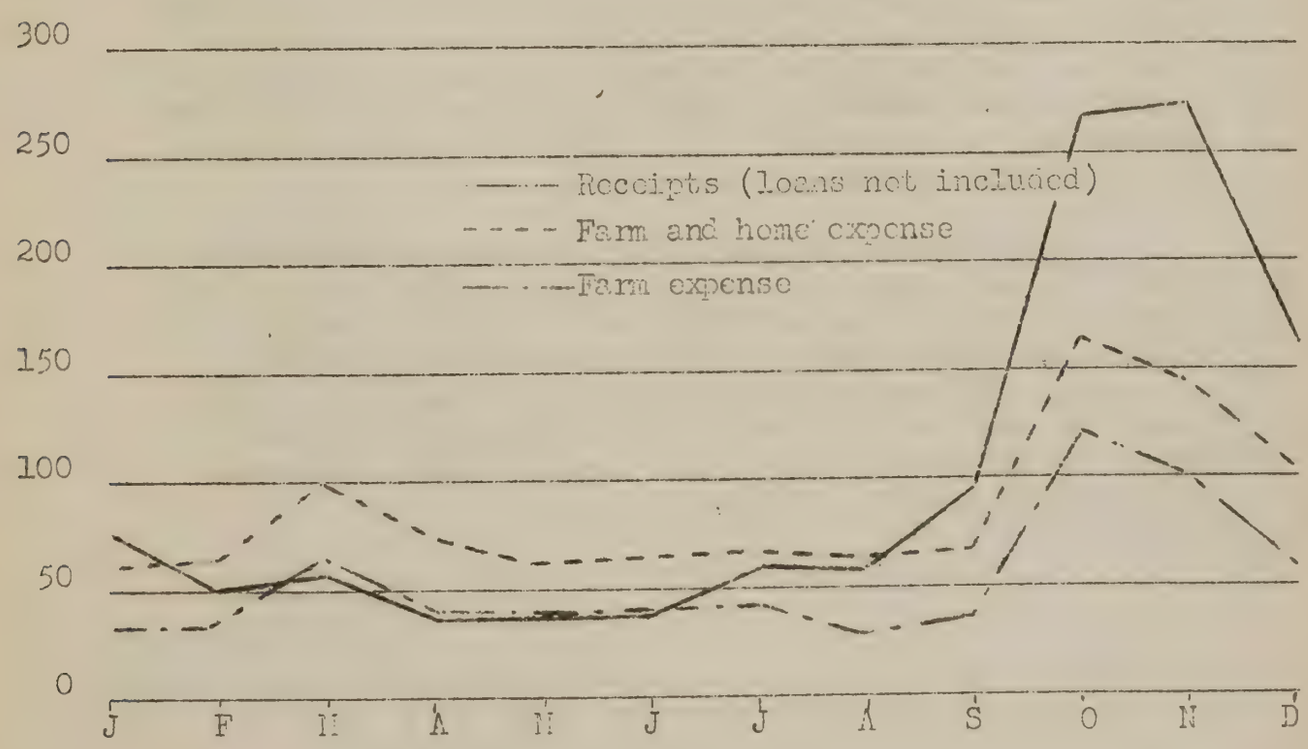


Fig. 2. Average monthly receipts and expenses for 124 crop farms in Area 6, 1940.

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS FOR SMALL FARMS (Fig. 3)

Figure 3 shows the amount of change in net worth, indebtedness, and assets during 1940 for each of 79 families on small farms. Net worth increased an average of $143 per family, indebtedness increased $171, and total assets increased $314.

Forty-nine families, or 62 percent of those on small farms had increased their net worth in 1940. Indebtedness had decreased for 26 and increased for 23 of these families. All but eight of the 49 families had increased the amount of total assets during the year.

The net worth of 30 of the families decreased during 1940. These families, about 38 percent of all those on small farms, were further from permanent rehabilitation at the end of 1940 than at the beginning. Twenty-four of the 30 families had increased their indebtedness. Fifteen of the 24 families increasing their indebtedness had also increased their assets but the increase in assets was less than the increase in indebtedness resulting in a decrease in net worth. Six of the families had decreased their indebtedness but there had been a greater decrease in their assets leaving a loss in net worth.

A few families increased the value of their real estate in the ending inventory although there had been no change in acreage and no improvements had been built. (Table 2). This tends to show increases in net worth where no real increase had occurred and results in a distorted picture of the farm business for any one year. Inventory values of real estate should reflect a normal value and be rarely changed.

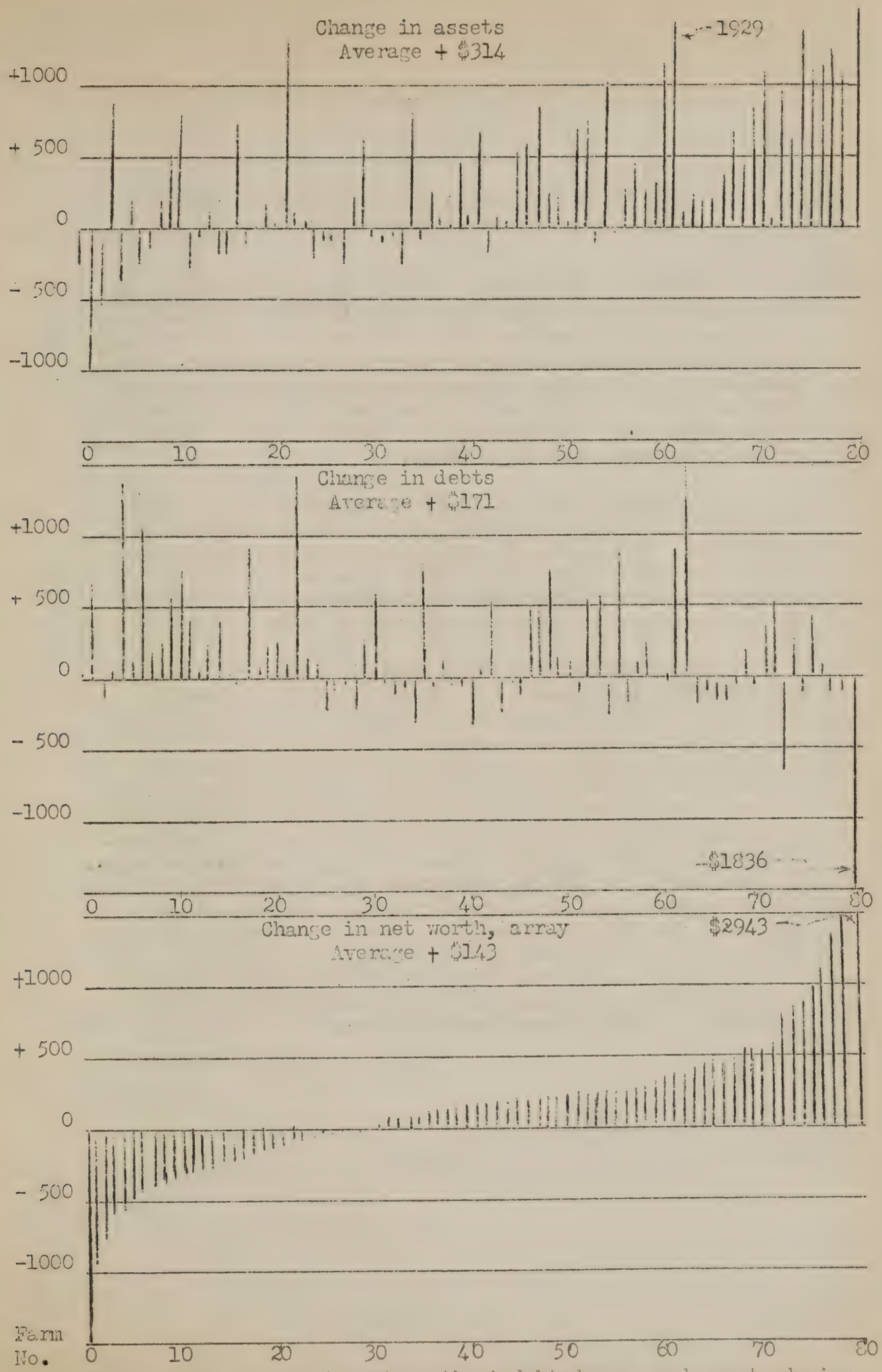


Fig. 3. The change in net worth, indebtedness, and assets during 1940 for each small farm in Area 6.

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS FOR LARGE FARMS (Fig. 4)

Sixty, or 66 percent, of the 91 families living on large farms increased their net worth in 1940 compared to 62 percent of the families living on small farms. The same relationship existed as to decreases in indebtedness. 45 percent of the families on large farms decreased indebtedness compared to 40 percent of the families on small farms. Total assets were increased by 68 percent of the families on both the small and large farms.

One-half of the 60 families living on large farms and increasing their net worth had decreased their indebtedness. Ten of the 30 families decreasing their indebtedness had also decreased their assets. Of the 31 families on large farms that had decreased their net worth 20 had increased indebtedness and 12 had increased assets.

The change in net worth indicates the progress the families have made towards becoming rehabilitated during the year. An increase in indebtedness may be desirable if it is accompanied by an increase in net worth over a period of years. Indebtedness should be liquidated or increased depending on the circumstances of the individual cases such as the quantity and type of land and labor available. Major emphasis should be placed on the abilities of the individual operators to manage various sizes and types of farm business. The success of the FSA loan programs will depend to a great extent on the accuracy of judging the abilities of the clients. Records pertaining to physical production such as yield of crops, mortality of livestock, eggs per hen, butterfat per dairy cow, pigs per litter, percent of cows raising calves, and pounds of beef produced are extremely important in judging managerial ability.

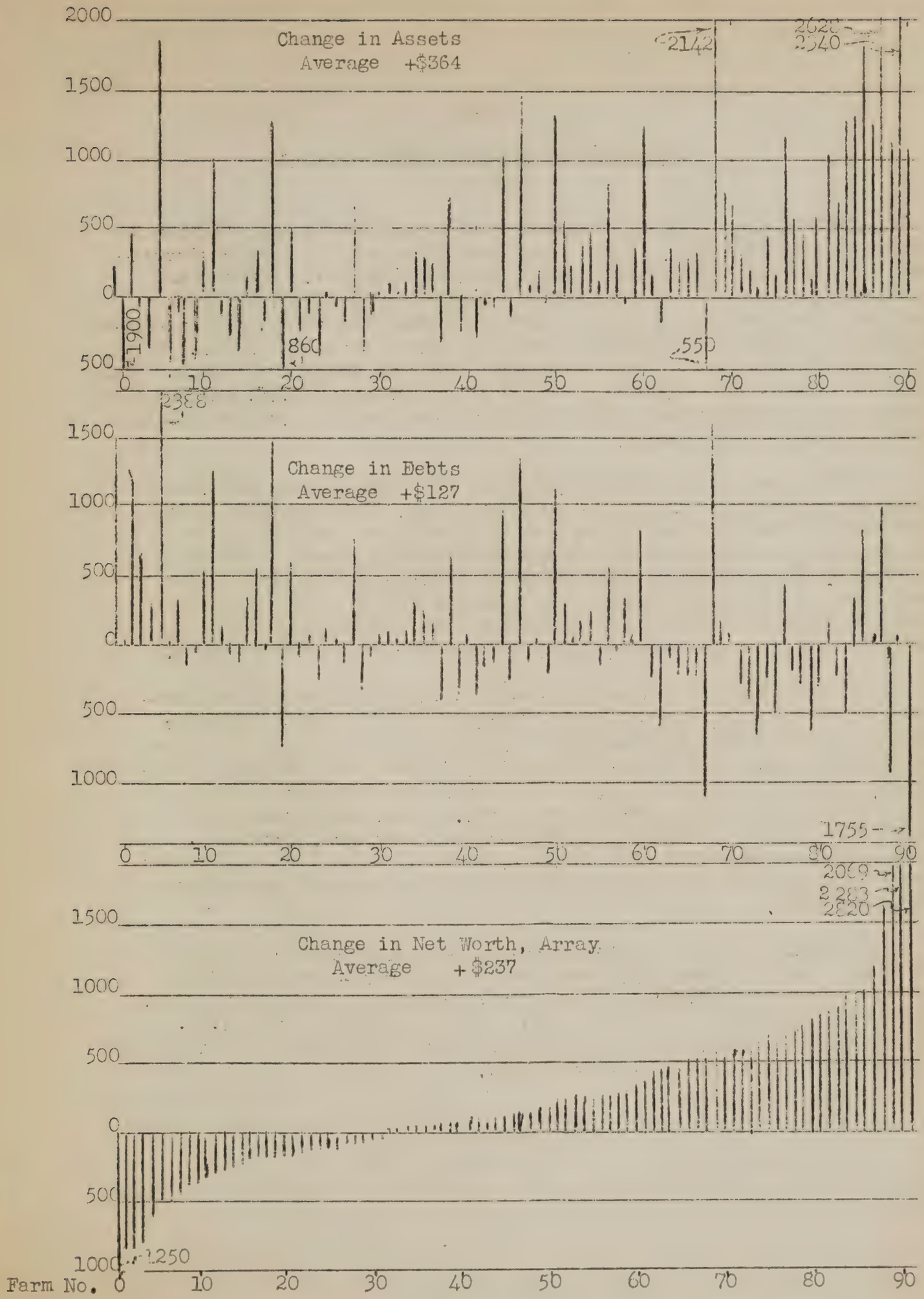


Fig. 4. The change in net worth, indebtedness and assets during 1940 for each large farm in Area 6.

ORGANIZATION AND EFFICIENCY FACTORS
(Table 8)

Table 8 is a summary of measures of organization and efficiency for each group of farms. Small livestock farms had the largest investment in power and other machinery per acre of cropland. Tractor and truck expense per acre of cropland was highest on large crop farms. Tractors were used to a greater extent on large crop farms. All machinery expense per acre of cropland was lowest on large livestock farms. Total expenses per $100 gross farm income was lowest on small crop farms. Large crop farms had a high expense per $100 gross income, $64.28, but the farm business was of sufficient size that this group had the largest family farm earnings of all groups.

Livestock farms had high livestock and feed expense per livestock unit as compared to costs for crop farms. This suggests that operators of the livestock farms were not producing sufficient feed but may have been feeding more adequate rations if proper feeds were purchased. The feeding of more adequate rations on livestock farms was indicated by the fact that they averaged $39.39 of dairy products sold per cow and 62 cents of eggs sold per hen compared to $25.11 of dairy products per cow and 48 cents of eggs per hen for crop farms.

Average family farm earnings were $610 for all crop farms compared to $399 for livestock farms. Earnings for the small livestock farms were $183 below the earnings for small crop farms but the earnings of large livestock farms averaged $243 below those of large crop farms. Income from sources outside the farm business tended to be larger when family farm earnings were low. Also, large families earned more income outside the farm business than small families. Family farm earnings per acre of cropland were larger for small farms than for large farms indicating a more intensive type of agriculture on small farms.

Forty-one farms, on which tractors were the principal source of power and there were not more than two head of work-stock per farm, had an average cash tractor expense of 75 cents per acre of cropland. The average investment in tractors per acre of cropland was $3.23. The investment in work-stock for 81 farms having workstock but no tractors was $1.73 per acre of cropland.

Table 8. Measures of Farm Organization and Efficiency of Operation by Size and Type of Farms, 1940, Area 6

Efficiency and Organization Factors		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
		(dol.)	(dol.)	(dol.)	(dol.)	(dol.)
Investment in power per acre of crop land, Jan. 1	1/	2.54	1.74	1.61	1.82	1.85
Investment in machinery per acre of crop land, Jan. 1	2/	.74	.50	.44	.44	.48
Tractor and truck expense per acre of crop land	3/	.26	.32	.30	.55	.44
All machinery expense per acre of crop land	4/	1.24	1.12	.78	1.09	1.08
Total farm expense per $100 gross farm income	5/	64.79	55.83	70.47	64.28	62.66
Livestock expense per livestock unit	6/	21.26	15.27	21.91	12.97	16.05
Debts per $100 farm property Jan. 1		75.01	78.00	50.84	63.23	67.44
Family farm earnings per farm	7/	418	601	374	617	553
Non-farm income per farm		186	186	225	137	172
Family farm earnings per acre of crop land		3.80	5.32	1.99	2.86	3.37

1/ The investment in power is the beginning inventory of tractors and work stock.

2/ Value of tractor, truck and automobile not included.

3/ Expense does not include depreciation.

4/ Tractor, truck and automobile expense included, depreciation not included.

5/ Total farm expense includes current farm cash expense, capital goods purchased and decrease in the farm property inventory. Gross farm income includes cash from receipts, increase in the farm property inventory, and family living furnished by the farm.

6/ Livestock units are calculated from the beginning inventory of work stock, dairy cows, sows, sheep, and hens. Livestock expense includes feed purchased and other livestock expense exclusive of livestock purchased or change in livestock inventory.

7/ Family farm earnings are the cash farm receipts, increase in farm inventory, and the value of home produced foods; less current farm cash expense, capital goods purchased, decrease in farm inventory, and 5 percent interest on operators equity of farm property as of January 1, 1940.

PLANNED AND ACTUAL CASH EXPENDITURES FOR FAMILY LIVING
(Table 9 discussed)

The average actual cash expenditure for all items of family living was $36 above that planned. In the case of the small families the average actual expenditure was $34 above that planned and for the large families $38 above that planned.

Food, medical care, life insurance, and "other" expenditures were found to have been higher for both small and large families than those planned. Food expenditures exceeded planned expenditures by $26. Medical expenditures were $10 higher than planned, insurance $4, and "other" $8. Household operation was $5 less than planned.

The average size of the small families was 3.1 persons and that of the large families 6.2 persons. However, total expenditures by large families were only one-fourth greater than those of the small families. Large families exceeded expenditures of the small families in all items except personal, medical, and minor furnishings and equipment.

The following summarizes briefly planning, and purchase and production of foods for the table by the families in this study. Value of foods produced 1/ by the families reporting have been interpolated with the cash purchases of foods of all of the families, inasmuch as lack of reporting was due to inadequate record book keeping rather than lack of production.

	Small families		Large families		All families	
	Planned	Actual	Planned	Actual	Planned	Actual
Total value of Family Living	$396	$379	$578	$479	$506	$437
Home Produced	274	232	420	294	366	271
Purchased	122	147	158	185	140	166

The value of purchased and produced food planned for the small family person per week was $2.46 and the value of that actually consumed was $2.35. For the large family person these data were $1.79 and $1.49, respectively. Even when reduced to an adult male equivalent basis 2/ the small families fared better from the standpoint of planning and consumption than did the large families. The planned and consumed value of the combined home produced and purchased foods for the small family adult male equivalent per week was $2.72 and $2.60 respectively. For the large family adult male equivalent, these amounts were $2.09 and $1.73. On this basis the small family adult male consumed 87 cents worth more food per week than did the large family adult male.

To low income families this is a sizeable amount and may mean the difference between adequacy and inadequacy of diet. One question arises. Why does this large difference exist in planning as well as in performance?

1/ The farm value of home produced is used here.
2/ See Appendix, table 1. Adult male equivalent scale used to weigh food consumption of family members.

Table 9 - PLANNED AND ACTUAL CASH EXPENDITURES FOR ITEMS OF FAMILY LIVING, BY SIZE OF FAMILY, 1940, AREA 6 1/

Item	Small families 2/			Large families 2/			All families 2/		
	Planned	Actual	Difference	Planned	Actual	Difference	Planned	Actual	Difference
Food	$122	$147	$ + 25	$158	$185	$ + 27	$140	$166	$ + 26
Clothing	56	59	+ 3	77	77	0	67	68	+ 1
Personal	24	19	- 5	23	18	- 5	23	19	- 4
Medical	25	38	+ 13	30	38	+ 8	28	38	+ 10
Household operation	54	45	- 9	60	59	- 1	57	52	- 5
Minor housing	4	2	- 2	5	3	- 2	4	2	- 2
Minor furnishings & equip.	10	13	+ 3	14	11	- 3	12	12	0
School, church, gifts, recrea.	21	16	- 5	28	27	- 1	24	22	- 2
Life insurance	4	8	+ 4	4	9	+ 5	4	8	+ 4
Other	1	8	+ 7	2	12	+ 10	2	10	+ 8
Total	321	355	+ 34	401	439	+ 38	361	397	+ 36

1/ Small families: those having less than 5 members. Large families: those having 5 or more members.

2/ Total families 170: Small families 85: Large families 85:
Average size of all families 4.7: small families 3.1: large families 6.2 .
Average adult male equivalent of all families 4.1 : small families 2.8: large families 5.3 .

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PLANNING PERFORMANCE
(Table 10)

The purpose of Table 10 is to show how expenditures for family living differed from the planned expenditures. Under-planning was found to occur with greater frequency than over-planning in both the small and large families.

Forty-two percent of the under-planning was in amounts in excess of $100. In a few instances it was as high as $300 to $500. Under planning in excess of $100 took place in 44 percent of the small families, and 39 percent of the large families.

Under-planning of less than $26 occurred over twice as frequently as over-planning in the same amount among the small families. Over-planning occurred a greater proportionate number of times between the amounts of $26 to $100 than did under-planning.

Where small family expenditures were under-planned the average was $89, where over-planned the average was $73. For the large families, these two figures were $114 and $73, respectively.

Some of the differences between performance and planning were due to factors that affected home production of foods for the table. As seen in a later section, production of foods for home use did not in all instances approach that planned, therefore necessitating cash expenditures not otherwise planned.

Table 10 ANALYSIS OF HOME PLANNING BY SIZE OF FAMILY, 1940, AREA 6 1/

Amount under or over-planned	No. of Small Families		No. of Large Families		No. of Families	
	Under planned	Over planned	Under planned	Over planned	Under planned	Over planned
$ 1-25	15	6	9	9	24	15
26-50	6	8	9	8	15	16
51-75	6	8	7	6	13	14
76-100	3	9	5	3	8	12
101 & over	24	-	19	10	43	10
Total	54	31	49	36	103	67
Average amount	$89	$73	$114	$73	$101	$73

1/ Small families: those having less than 5 members. Large families: those having 5 or more members.

MONTHLY DISTRIBUTION OF EXPENDITURES
(Table 11)

Family living expenditures for the small families ranged from a low of $23 in June to a high of $37 for each of the months of October and November. Among the large families this range was from a low of $29 in June to a high of $45 in October. For trend in family living expenditures by size and type of farm for all families see Fig.'s 1 and 2.

With greater receipts from farm products being realized in the fall of the year, and with the beginning of school, the need for replenishing the clothing supply, and with the advent of the holiday season, the trend of family living expenditures is toward a definite increase. However with the advent of January, expenditures take a precipitous drop and do so each year. One comparison made was that with a similar study as this of records kept during 1939 which showed the same trend of increase in expenditures toward the end of the year.

Expenditures during the three summer months of June, July and August were, for the most part, lower than at any other season of the year. Fresh vegetables and fruits from the garden, no school expense, and fewer clothing needs contributed to these lower expenditures.

Table 11 - MONTHLY DISTRIBUTION OF FAMILY LIVING EXPENDITURES, BY SIZE OF FAMILY, AREA 6, 1940 1/

Month	Small families (Amount)	Large families (Amount)	All families (Amount)
January	$25	$30	$27
February	27	33	30
March	32	36	34
April	27	34	30
May	25	33	29
June	23	29	26
July	25	30	28
August	30	40	35
September	31	41	36
October	37	45	41
November	37	44	41
December	36	44	40
Total	$355	$439	$397

1/ Small families: those having less than five members.
Large families; those having five or more members.

HOME PRODUCED FOODS
(Table 12 discussed)

Planning the consumption of different items produced on farm proved to be the most accurately done among the livestock and livestock products items. These were not subject to as violent production fluctuation as were garden products which in many cases were dependent on the weather for their growth.

For most items planning exceeded actual production and consumption. This however may be justified because it places a "bench mark" which the farm family is expected to attain if it expects to have a well rounded "live at home" program.

Nine percent of the total farm value of home produced foods used by all of the families was in the form of vegetables, fruits, and cereals. For the small families, this was seven percent and for the large families 11 percent.

The total value of food purchased and produced 1/ by the small families was $379. If all the food used had been purchased the cost would have been $502. The additional expenditures would have most probably necessitated reduction in expenditures for other family living items or of some farm operating items or of investment in capital goods. Among the large families the former figure was $479 and the latter would have been $637. With additional mouths to feed, the large families have placed greater emphasis on home production and use of foods than have the small families, however even then as pointed out in the discussion of table 9, and when reduced to a per person basis the total value of the food consumed was considerably below that of the small families.

1/ The farm value of home produced food is used here.

Table 12 SUMMARY OF HOME PRODUCED FOODS PLANNED AND USED BY THE FAMILY, BY SIZE OF FAMILY, 1940, AREA 6 1/

	Unit	Small families 2/				Large families 2/				All families 2/			
		Plan'	Used	Farm value	Retail value	Plan'	Used	Farm value	Retail value	Plan'	Used	Farm value	Retail value
Milk	gal.	437	402	$84	$145	665	617	$130	$222	563	521	$109	$188
Cheese	lb.	15	4	1	1	22	6	1	1	18	5	7	10
Butter	lb.	95	77	19	26	156	117	32	40	129	99	27	34
Cream	gal.	6	25	30	45	8	10	12	18	7	17	20	31
Lard, fat pork, bacon	lb.	171	114	14	16	197	156	19	23	185	137	16	21
Pork	lb.	285	229	37	55	282	189	30	45	283	207	33	50
Beef	lb.	70	41	7	10	107	50	8	12	90	46	8	12
Mutton	lb.	-	-	-	-	-	-	-	-	-	-	-	-
Fish	lb.	5	1	-	-	10	2	-	1	7	1	-	-
Poultry	lb.	85	61	13	16	124	78	16	21	106	70	15	19
Eggs	doz.	128	94	11	15	170	124	15	20	151	110	13	18
Beans and nuts	lb.	54	20	1	2	82	54	3	4	69	38	2	3
Tomatoes	lb.	150	100	3	5	150	150	4	10	150	125	3	7
Leafy g & y vegetables	lb.	275	125	4	6	525	200	6	10	425	175	5	9
Other vegetables	lb.	640	100	3	6	860	450	14	18	760	300	9	18
Fruit	lb.	100	50	2	2	350	50	2	2	250	50	2	2
Potatoes	lb.	120	60	1	2	780	60	1	2	480	60	1	2
Sweet Potatoes	lb.	55	-	-	-	660	-	-	-	385	-	-	-
Flour	lb.	73	43	1	1	146	65	1	2	113	55	1	2
Cereal	lb.	15	2	-	-	23	4	-	-	20	3	-	-
Meal	lb.	22	26	1	1	61	23	-	1	44	24	-	1
Syrup, sorghum & honey	qt.	15	3	-	1	20	2	-	-	18	3	-	1
Total		xx	xx	232 3/	355	xx	xx	294 3/	452	xx	xx	271 3/	428

1/ Small families: those having less than five members.
Large families: those having five or more members.
2/ Total families reporting 114 : Small families 51 : Large families 63 :
3/ Farm value of home produced foods planned by all families $366 : Small families $274 : Large families $420.

CONSERVED FOODS
(Table 13)

The plans that the small families made exceeded by 77 quarts the quantity of food stuffs that they actually conserved during the year. A much wider margin was found among the large families who fell short of their planned conserving program by 231 quarts. The greatest differences between planning and actual performance occurred in the items of tomatoes and vegetables. Planning of smoked and salted meats was far below that actually smoked and salted for home use.

It is apparent from the data that both large and small families were not too well stocked with a carry over of conserved food stuffs from the previous year (1939). The quantity carried over (164 quarts) by the families could hardly be considered sufficient provision until June or the beginning of the fresh vegetable and fruit season unless supplemented by a considerable quantity of dried and stored fruits and vegetables. This lack of conserved food stuffs meant expenditure of funds for food at a time of the year when least available or it meant doing without the necessary food for a well balanced diet. A two year canning program carried on each year will serve to provide a reserve of conserved food stuffs for those years when weather conditions or other factors prevent the raising of a normal supply of fruits and vegetables.

Table 13 - SUMMARY OF CANNING ACTIVITY, BY SIZE OF FAMILY, AREA 6 1/

		Small families 2/			Large families 2/			All families 2/		
	Unit	On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.
Canned:										
Tomatoes	qt	12	45	18	23	103	35	18	76	27
Vegetables	qt	58	159	100	76	294	159	68	231	131
Fruit	qt	55	93	82	66	143	91	61	119	86
Fruit juice	qt	1	2	4	3	3	7	1	2	6
Meat	qt	16	34	22	10	47	22	13	41	22
Jams & jellies	qt	2	3	14	1	2	19	1	2	16
Pickles	qt	2	1	16	2	3	22	2	2	19
Kraut	qt	-	-	4	-	-	9	-	-	7
Total	qt	146	337	260	181	595	364	164	473	314
Smoked & salted meat	lb	33	55	185	13	36	169	23	45	176

1/ Small families: those having less than five members. Large families: those having five or more members.

2/ Total families reporting 128: Small families 60: Large families 68:

-37-

HOUSEHOLD INVENTORY
(Table 14)

When household inventories of small and large families were compared and when reduced to a per person basis, the small families showed a greater number of items per person than did the large families. They also showed a greater proportionate total value per person than did the large families. The total value of the household inventory of all the families was $264 that of the small families $255 and large families $273.

Both groups of families showed adequate mattresses for their beds. For covers, comforts and quilts were used in place of blankets.

Only one out of three families had a couch or davenport. Four out of five families reported cupboards, two out of five radios, one out of three rugs, half of them reported refrigerators, and a little more than half of them reported pressure cookers. The large families averaged .9 of a sewing machine each whereas the small families reported a greater number of fruit jars (223), whereas the small families reported 152.

There was only $5 difference in the value of clothing possessed by the large and small families, the former having $42 worth and the latter $37 worth.

Table 14 - INVENTORY OF HOUSEHOLD ITEMS, BY SIZE OF FAMILY, 1940, Area 6 1/

Item	Small families 2/	Large families 2/	All families 2/
Single beds	.2	.3	.3
Double beds	2.0	2.9	2.4
Single mattresses	.2	.3	.3
Double mattresses	2.4	3.2	2.8
Blankets, etc.	1.7	2.5	2.1
Comforts & quilts	10.0	12.0	11.2
Davenport or couch	.3	.4	.4
Chest of drawers	1.2	1.1	1.1
Straight chairs	4.3	4.9	4.6
Easy rockers	1.0	1.0	1.0
Dining tables	.9	1.0	1.0
Other tables	1.1	.9	1.0
Cupboards	.7	.8	.8
Radios	.4	.4	.4
Rugs	.3	.2	.3
Linoleums	1.6	1.0	1.3
Refrigerators	.5	.4	.5
Sewing machines	.5	.8	.7
Pressure cookers	.5	.6	.6
Jars	152	223	189
Value of clothing	$37	$42	$40
Value of household inventory	$255	$273	$264

1/ Small families; those having less than five members.
Large families: those having five or more members.
2/ Total families reporting 148; Small families 70: Large families 78.

APPENDIX

Table 1. - Consumption Unit Scale

Age in years	Weights in Terms of Adult Male		
	Child	Boy or Man	Girl or Woman
1.	.4		
2.	.5		
3.	.55		
4.	.6		
5.	.65		
6.	.75		
7.	.75		
8.	.8		
9.	.8		
10.	.85		
11.		.95	.85
12.		.95	.95
13.		1.0	1.0
14.		1.0	.95
15.		1.05	.9
16.		1.15	.85
17.		1.1	.85
18 to 59		1.0	.95
60 and over		1.0	.9

Addepted from scale for weighing food consumption published by E. L. Kirkpatrick, Rosalind Tough and May L. Cowles in "How Farm Families Meet the Emergency," Wisconsin Agricultural Experiment Bulletin 126.

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UNITED STATES DEPARTMENT OF AGRICULTURE

FARM SECURITY ADMINISTRATION

in cooperation with

BUREAU OF AGRICULTURAL ECONOMICS

An Analysis of 95 FSA Farm and Home Plans and Record Books in the Panhandle of Texas, 1940

Counties

Armstrong	Hartley	Parmer
Briscoe	Hemphill	Potter
Carson	Hutchinson	Randall
Castro	Lipscomb	Roberts
Dallam	Moore	Sherman
Deaf Smith	Ochiltree	Swisher
Gray	Oldham	Wheeler
Hansford		

Amarillo, Texas

October, 1941

ANALYSIS OF FARM FAMILY RECORD BOOKS FOR AREA 5, 1940

The Farm Security Administration, Region 12, and the Division of Farm Welfare and Costs and the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics, cooperated in the analysis of Farm Family Record Books kept by FSA clients in 1940. Due credit should be given to the farmers who kept these record books and the county FSA personnel who gave the farmers assistance and sent these books to the regional office. All preliminary tabulations and summations from these books were made by Work Projects Administration under Official Project No. 65-2-66-622.

Region 12 of the FSA was divided into six areas, principally on the basis of types of farming. Wherever possible, FSA district boundaries were followed in order that the results of the study would be directly useful to FSA district supervisors. In some cases, two or more districts are combined into one area.

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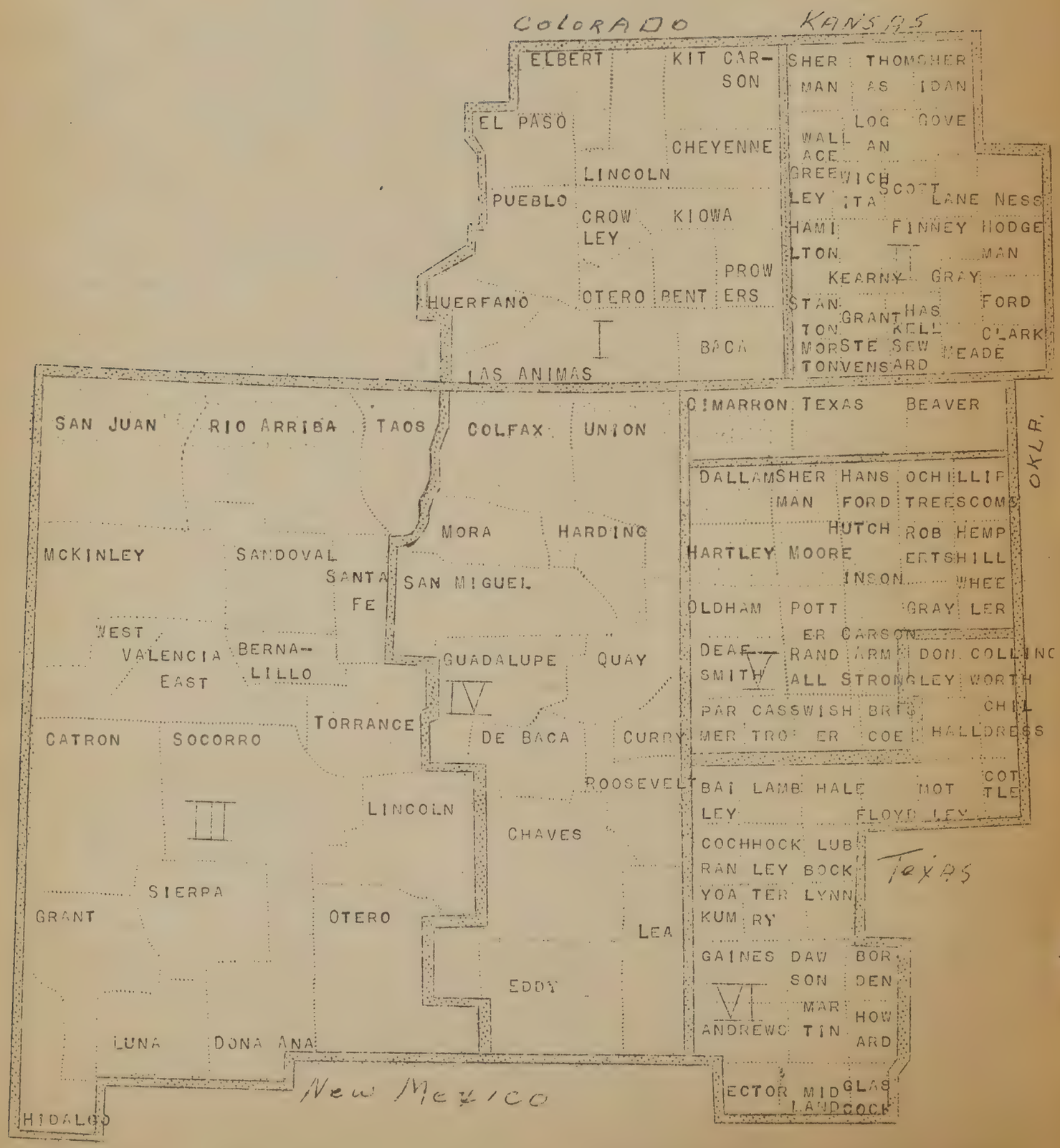
To make the results of these analyses of the greatest use in planning to Farm Security Administration personnel, farms were grouped by size and type of farm and size of family. Size of farm groups were determined within each area, placing about one-half as small farms and the other half as large farms. Only two classifications were made for type of farms--crop and livestock. The type of farm classification was based on the farmer's sales and inventory reportings and on the 1940 farm plans. Most of the farms in this area had crop and livestock enterprises of about equal importance and were not definitely crop or livestock farms. Size of family is reflected in the planning and consumption behavior of the families, the proportionate expenditures for various items of family living, the amount and kinds of subsistence produced on the farm, the extent of their conservation of foods program and some indication of their household inventories. On the basis of family size, two groupings were made--families of less than five persons and those of five or more persons.

According to an FSA report dated June 24, 1941, there were 1,437 Farm Family Record Books in this area. Only 190 were sent in to the regional office to be used in this study. Of these, 95 were complete enough for use in this report. Tables are presented with brief explanatory statements that should furnish assistance and guidance to county and district FSA personnel in the working out of farm and home plans.

ANALYSIS OF FSA RECORDS BY AREAS FOR REGION XII



SUMMARY AND RECOMMENDATIONS

1. The actual results deviated considerably from the planned for a number of items. Crop sales were 46 percent of the planned, indicating crop yields were lower than normal or plans were not based on normal conditions. Planned cash expenses for feed, automobiles, tractors and trucks, and capital goods were commonly lower than the actual expenses. Record books kept on the farms in previous years should be used as a guide in making new farm plans.

2. Assuming that all dairy products sold were sour cream, it was concluded that the butterfat sold and used in the home averaged 198 pounds per dairy cow. However, there was some indication that a few farmers were selling dairy products other than sour cream. Eggs sold and used in the home averaged 78 eggs per hen. Improvement in the quality of livestock and the methods of feeding and handling are urgently needed on a majority of the farms.

3. Family farm earnings, cash net farm income, and other income not from the farm averaged larger for large farms than for small farms. In general, family farm earnings and cash net farm income on crop farms were larger than on livestock farms in 1940. There was some indication that crop production was nearer normal on crop farms than on livestock farms causing more satisfactory incomes on the crop farms.

4. Loans to meet current farm and home expenses were needed from March to July inclusive on livestock farms and from March to June inclusive on crop farms. Current farm expenses and receipts were more constant on livestock farms than on crop farms.

5. Fifty-three percent of the families increased their net worth in 1940, 52 percent decreased indebtedness, and 61 percent increased assets. The FSA should liquidate or increase their loans on farms depending on the quality and type of land, machinery, livestock, labor and management available for each farm. The success of the FSA loan programs will depend to a great extent on the accuracy of judging the abilities of the clients. Records pertaining to physical production such as yields of crops, eggs per hen, butterfat per cow, pigs per litter, percent of cows raising calves, and mortality of livestock can be of extreme importance to FSA supervisors in judging managerial ability.

6. The average actual expenditures for family living of all the families were $19 in excess of those planned. With the exception of food, expenditures for the various items of family living were within $10 in excess of or below the planned expenditures. The total value of food consumed by the large families was only one-fourth greater than that of the small families, though when compared by size, the large families had twice as many members. Part of this difference in value of food consumed may be attributed to the fact that the large families did not produce as much food from the farm as they had planned.

7. Family living expenditures varied considerably from month to month, there being as much as 50 percent increase from the lowest to the highest expenditure month. They reached their peak in December. The expenditures for family living of families on livestock farms did not vary as noticeably as those of families on crop farms.

8. Over 90 percent of the total value of foods produced on the farm were from livestock and livestock products. The remainder came from garden and orchard products. Sixty-two percent of the total value of food consumed was home produced. It is highly desirable that this be at least 75 percent. The small families produced $232 worth of food for the table and the large families $300 worth. With greater production of foods from the farm, certain of the resources normally apportioned to food expenditures could then be released for expenditures on other necessities or desired satisfactions.

9. The families in this study conserved an average of 311 quarts of fruits, vegetables, and meats. This is a slight decrease over the performance of a similar group of families in this area, studied during the previous year, who conserved an average of 357 quarts of foodstuffs. The carry-over of foodstuffs (157 quarts) from 1939 was hardly sufficient to adequately provision the families until the next fresh fruit and vegetable season. Also, it was far below the quantity that the families should carry over to provision themselves for an additional twelve months in the event of drought or other adverse conditions.

10. Very little difference was found between the value of household inventories or between the number of each of the items, except for certain large items possessed by the large and small families. From this it can be assumed that the large families are using less expensive items and, likewise with greater wear being on these items, will have to make replacements sooner.

SIZE OF FARMS AND FAMILIES, INVENTORIES OF FEED AND LIVESTOCK
(Table 1 discussed)

Farms of 320 acres or less were classified as small farms. Small livestock farms and crop farms were similar in size. The small livestock farms averaged 232 acres of land with 178 acres of cropland and 45 acres of permanent pasture. The small crop farms averaged 231 acres with 182 acres of cropland and 39 acres of permanent pasture. Large livestock farms and crop farms differed in that large crop farms were 90 acres larger in size and had 82 acres more cropland. The large livestock farms averaged 604 acres of land with 384 acres of cropland and 200 acres of permanent pasture, compared to 694 acres of land with 203 acres of permanent pasture and 466 acres of cropland for large crop farms.

Supplies of grain and roughage increased during the year as shown by the beginning and ending inventories, but were not adequate for the number of livestock being kept, except on large crop farms. At the end of the year, there was less than one ton of roughage per head of work-stock and cows on the small crop farms and the large livestock farms, slightly more than one ton on small livestock farms and approximately seven tons per head on large crop farms.

Average small livestock farms had approximately three head of work-stock, six dairy cows, one beef cow, one or two sows and 76 hens, compared to three or four head of work-stock, four dairy cows, one sow and 65 hens on average small crop farms. Average large livestock farm had about three head of work-stock, six or seven dairy cows, three beef cows, one or two sows, and 75 hens. Average large crop farms had one head of work-stock, six dairy cows, three beef cows, one sow and 85 hens. Large livestock farms and large crop farms were similar as to the number of livestock kept but large crop farms had more cropland and larger crop enterprises.

Table 1. Acres of land, size of families, and inventories of feed and livestock for farms by size and type in Area 5, 1940

Item	Unit	Average per Farm				
		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Number of farms	No.	40	20	27	8	95
Cropland	Acre	178	182	384	466	261
Permanent Pasture	Acre	45	39	200	203	101
Total land in farms	Acre	232	231	604	694	376
Persons in the family	No.	4.1	4.7	3.9	4.9	4.2
Adult males 16 yrs. or more	No.	1.1	1.4	1.3	1.2	1.2
Grain						
January 1	Bu	46	83	31	250	67
December 31	Bu	49	173	59	282	97
Roughage						
January 1	Ton	5.7	5.1	9.3	37.5	9.2
December 31	Ton	13.1	6.2	8.1	76.1	15.6
Work-stock						
January 1	No.	2.7	3.4	2.7	1.2	2.7
January 1	Dol	139	145	168	59	142
Dairy cows						
January 1	No.	5.9	4.1	5.5	5.5	5.4
December 31	No.	6.1	4.1	7.4	6.3	6.1
Beef cows						
January 1	No.	0.8	0.1	3.1	3.2	1.5
December 31	No.	0.4	0.1	2.8	3.2	1.2
Sows						
January 1	No.	1.4	0.6	1.5	0.6	1.2
Sheep						
January 1	No.	0	0	0	0	0
Hens						
January 1	No.	76	65	75	85	74
Productive Livestock Unit 1/						
January 1		7.9	5.0	9.9	9.7	8.0

1/ Productive livestock units were calculated from the beginning inventory of dairy cows, beef cows, sows, sheep, and hens.

INVENTORIES OF FARM PROPERTY, HOUSEHOLD PROPERTY, AND INDEBTEDNESS
(Table 2 discussed)

Sixty percent of the farmers on small livestock farms owned tractors compared to 35 percent of those on small crop farms. Tractors were more important on large farms. Tractors were owned by 81 percent of the farmers on large livestock farms and 88 percent of the farmers on large crop farms. However, the investment in tractors was increasing rapidly on small farms. Investments in tractors increased by approximately one-third on small livestock farms and doubled on small crop farms in 1940 but remained fairly constant on large farms.

All the farmers on large farms owned automobiles or trucks compared to 90 percent of the farmers on small crop farms and 88 percent of the farmers on small livestock farms. Investments in automobiles were fairly constant except on large crop farms where there was no change in the number of automobiles during the year but the value increased from $192 to $273 per automobile.

Twenty-five percent of the farmers on crop farms held title to part or all of the land they operated compared to 19 percent of the farmers on livestock farms. Real estate owned by the farmers was valued at $16.15 per acre for livestock farms and $20.48 per acre for crop farms at the beginning of the year.

The value of farm property owned by the farmers increased during the year for all groups. The smallest average increase was $119 per farm on small livestock farms and the largest increase was $306 on large crop farms. Increases in livestock on large farms accounted for about two-thirds of their increase in the value of farm property. There was no important change in the value of livestock on small farms. Approximately one-half of the increase in farm property on small farms was caused by increases in feed and supplies. There was little change in the value of the household inventory or cash, savings, and accounts due. The changes in total assets were principally those caused by changes in the farm inventory.

Indebtedness to FSA increased for all groups but total indebtedness decreased an average of $47 per farm for lare livestock farms and $778 for large crop farms. Average indebtedness to FSA for all groups increased $166 per farm but total indebtedness decreased $59 per farm indicating that the increase in FSA loans was used to pay the debts owed to other persons or agencies. FSA supervisors should assist the farmers in making programs for debt payments that will be equitable for all.

Table 2. Inventories of farm property, household property, and indebtedness for families grouped according to the size and type of their farms, Area 5, 1940

Item		Unit	Average per Farm				
			Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
Farms		No.	40	20	27	8	95
Tractors	Jan. 1	No.	0.5	0.3	0.8	1.1	0.6
	Jan. 1	Dol	172	103	395	681	263
	Dec. 31	No.	0.6	0.4	0.8	1.2	0.7
	Dec. 31	Dol	225	209	394	688	308
Autos or trucks	Jan. 1	No.	0.9	0.8	1.1	1.2	1.0
	Jan. 1	Dol	95	92	153	231	123
	Dec. 31	No.	0.9	0.9	1.1	1.2	1.0
	Dec. 31	Dol	93	114	149	328	133
Other machinery	Jan. 1	Dol	171	218	301	491	245
	Dec. 31	Dol	175	192	290	421	232
Livestock	Jan. 1	Dol	665	469	828	757	678
	Dec. 31	Dol	653	470	926	971	719
Feed and supplies	Jan. 1	Dol	124	141	155	598	176
	Dec. 31	Dol	194	232	194	654	241
Real Estate owned	Jan. 1	Ac.	34	54	65	62	50
	Jan. 1	Dol	745	1160	854	1215	903
	Dec. 31	Ac.	34	54	65	62	50
	Dec. 31	Dol	751	1160	886	1217	915
Total farm inventory	Jan. 1	Dol	1972	2183	2686	3973	2388
	Dec. 31	Dol	2091	2377	2839	4279	2548
Household inventory	Jan. 1	Dol	274	276	336	469	308
	Dec. 31	Dol	295	281	378	495	332
Cash, savings, and accounts due	Jan. 1	Dol	172	86	173	246	160
	Dec. 31	Dol	151	61	137	255	137
Total Assets 1/	Jan. 1	Dol	2418	2545	3195	4688	2856
	Dec. 31	Dol	2537	2719	3354	5029	3017
Indebtedness to FSA	Jan. 1	Dol	727	624	1376	1248	934
	Dec. 31	Dol	920	734	1554	1384	1100
Total Indebtedness 2/	Jan. 1	Dol	1196	1723	2775	3026	1910
	Dec. 31	Dol	1250	1794	2728	2248	1851

1/ Includes real estate owned

2/ Includes real estate mortgages on real estate owned.

CASH RECEIPTS AND EXPENSES, ALL FARMS
(Table 3 discussed)

Total cash farm receipts per farm were $206 less than planned on 95 farms in Area 5. Most of this discrepancy between the actual and planned receipts was caused by crop sales which were $288 less than planned. Seven of the 95 books contained information on actual and planned crop yields. For these records the average planned wheat yield was 6.8 bushels, actual 3.3 bushels; planned grain sorghum yield 9.0 bushels, actual 4.0 bushels; and planned forage sorghum yield 1.0 ton, actual 0.5 ton. These average yields cannot be considered reliable for all the farms analyzed because only seven percent of the farmers reported and the actual crop yields given probably were for acres harvested, while planned yields were for acres planted. Most of the discrepancy between actual and planned crop sales probably was caused by lower than planned crop production. However, some of the difference may have been caused by farmers feeding or storing a greater than planned portion of the crops.

Livestock receipts were less than planned for poultry, eggs, other livestock, and hogs; and more than planned for dairy products and cattle. Egg production reported by four farmers averaged 72 eggs per hen. Eleven farmers reporting on chicks raised had lost 65 percent before the chicks were two months old. The average butterfat production for one farm having this information available was 150 pounds per dairy cow. Hog receipts were $43 per farm which averaged $36 per sow on hand at the beginning of the year. Reports on pig production on four farms averaged six pigs per litter. Too few of the farmers reported physical livestock production to give reliable averages for the groups of farms in this report.

An indication of butterfat and egg production can be obtained by using average prices received by the farmers and calculating the quantity of products sold. Assuming all dairy products sold were sour cream and that the average price received was 26 cents per pound of butterfat farmers sold 183 pounds per dairy cow 1/ making a total of 198 pounds of butterfat when the butterfat used in the home was included. Eggs sold were valued at 13 cents and averaged 53 eggs per hen 2/. Twenty-five eggs per hen were used in the home making a total of 78 eggs per hen used in the home and sold.

Current farm cash expenses per farm were $64 more than planned. Feed expense was $68 more than planned, but crop expense was $56 less than planned indicating feed production was less than expected. Automobile expense was 15 percent more than planned, tractor and truck 27 percent more than planned, and hired labor 54 percent more than planned. Current cash farm expenses were $2.92 per acre of cropland. The tables show that besides the current farm cash expense and the farm cash receipts the farmer's had cash expenditures for the purchase of capital goods, and the payment of debts. Additional cash was obtained from loans and income not from the farm which included work off the farm and grants in those cases where grants were given.

1/ Number of dairy cows obtained by averaging beginning and ending inventories.

2/ Number of hens in the beginning inventory.

Table 3. A comparison of the actual and planned receipts and expenses for 95 farms in Area 5, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of Planned 2/
Receipts				
Crops	246	534	- 288	46
Poultry	26	33	- 7	79
Eggs	42	53	- 11	79
Dairy products	277	262	+ 15	106
Cattle	131	106	+ 25	124
Hogs	43	69	- 26	62
Other livestock	21	27	- 6	78
Other (farm)	111	36	+ 75	308
AAA payments	229	212	+ 17	108
Cash farm receipts	1126	1332	- 206	84
Other income	255	118	+ 137	206
Money borrowed	635	366	+ 269	173
Total cash received	2016	1816	+ 200	111
Home produced foods 3/	259	324	- 65	80
Total	2275	2140	+ 135	106
Expenses				
Feed	207	139	+ 68	149
Crops	139	195	- 56	71
Automobile	92	77	+ 15	119
Tractor and truck	118	93	+ 25	127
Other machinery	47	49	- 2	96
Building and land	9	11	- 2	82
Livestock	12	12	0	100
Hired labor	43	28	+ 15	154
Other (farm)	95	94	+ 1	101
Current farm cash expenses	762	698	+ 64	109
Capital goods	317	221	+ 96	143
Debt payments	488	407	+ 81	120
Family living expenditures	406	388	+ 18	105
Total cash expended	1973	1714	+ 259	115
Home produced foods 3/	259	324	- 65	80
Total	2232	2038	+ 194	110

1/ Actual minus the planned.
2/ Planned = 100 percent
3/ An average of 76 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON SMALL LIVESTOCK FARMS
(Table 4 discussed)

Cash farm receipts per farm were $248 less than planned and current farm cash expenses were $37 more than planned. The various items of farm receipts were within $40 of the planned except crops which were $294 less than planned. The farmers borrowed $196 more than planned and obtained other income not from the farm that was $114 more than planned. It was necessary for the farmers to work off the farm and borrow more than planned because farm receipts were $248 less than planned and the total of current farm cash expenses, capital goods purchased, debt payments, and family living were $180 more than planned.

The individual items of current farm cash expenses differed from the planned by not more than $20 except feed expense which was $78 more than planned and crop expense which was $50 less than planned. This discrepancy between the actual and planned feed and crop expenses indicates crop production was less than planned. Total cash expended for all purposes including family living was $1695 per farm. Total cash received from all sources including money borrowed was $1704.

The cash net farm income, which is the difference between the cash farm receipts and the current farm cash expenses, was $299, lacking $85 of being sufficient to pay the family living expenses. The cash net farm income was $339 for small crop farms, $326 for large livestock farms, and $866 for large crop farms. The cash net farm income was $37 less than family living expenses on small crop farms, $113 less on large livestock farms, but $380 more than family living expenses on large crop farms. All of these groups of families had other cash income not from the farm that was more than the amount by which family living expenses exceeded the cash net farm income.

Table 4. A comparison of the actual and planned receipts and expenses for 40 small livestock farms in Area 5, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	148	442	- 294	33
Poultry	28	39	- 11	72
Eggs	40	42	- 2	95
Dairy products	304	280	+ 24	109
Cattle	122	103	+ 19	118
Hogs	50	58	- 8	86
Other livestock	22	27	- 5	81
Other (farm)	83	43	+ 40	193
AAA payments	144	155	- 11	93
Cash farm receipts	941	1189	- 248	79
Other income	221	107	+ 114	207
Money borrowed	542	346	+ 196	157
Total cash received	1704	1642	+ 62	104
Home produced foods 3/	230	301	- 71	76
Total	1934	1943	- 9	100
Expenses				
Feed	241	163	+ 78	148
Crops	99	149	- 50	66
Automobile	81	62	+ 19	131
Tractor and truck	78	85	- 7	92
Other machinery	43	34	+ 9	126
Building and land	9	6	+ 3	150
Livestock	12	14	- 2	86
Hired labor	18	18	0	100
Other (farm)	61	74	- 13	82
Current farm cash expenses	642	605	+ 37	106
Capital goods	320	235	+ 85	136
Debt payments	349	299	+ 50	117
Family living expenditures	384	376	+ 8	102
Total cash expended	1695	1515	+ 180	112
Home produced foods 3/	230	301	- 71	76
Total	1925	1816	+ 109	106

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 34 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON SMALL CROP FARMS
(Table 5 discussed)

Cash farm receipts per farm were $153 less than planned on small crop farms compared to $248 less than planned on small livestock farms. However, the planned cash farm receipts on the small crop farms were only $1072 compared to $1189 planned for the small livestock farms. These two groups of farms were practically identical as to average size and acres of cropland and permanent pasture. Apparently the plans were made with the expectation that the few additional livestock on the livestock farms would result in larger receipts. Actually the cash farm receipts were nearly the same; $919 for small crop farms and $941 for small livestock farms.

The families on small crop farms had an average of 65 hens at the beginning of the year and their egg receipts averaged 34 cents per hen. These receipts from eggs per hen were appreciably lower than for the other groups. Eggs sold averaged 53 cents per hen for small livestock farms, 64 cents for large livestock farms, and 98 cents for large crop farms. The actual egg receipts were 58 percent of the planned on small crop farms, 95 percent on small livestock farms, 65 percent on large livestock farms; but 12 percent more than planned on large crop farms.

Current farm cash expenses were $59 more than planned on small crop farms compared to $37 more than planned on small livestock farms. Individual items of current farm cash expense deviated from the plans on the small crop farms approximately as on the small livestock farms. Actual and planned items of farm expenses did not differ by more than $20 except for feed expense which was $51 more than planned and crop expense which was $35 less than planned. Capital goods purchased, debt payments, and family living expenses were approximately as planned.

Table 5. A comparison of the actual and planned receipts and expenses for 20 small crop farms in area 5, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference	Actual
			Dollars 1/	Pct. of planned 2/
Receipts				
Crops	423	545	- 122	78
Poultry	18	23	- 5	78
Eggs	22	38	- 16	58
Dairy products	116	136	- 20	85
Cattle	42	26	+ 16	162
Hogs	28	44	- 16	64
Other livestock	9	23	- 14	39
Other (farm)	77	9	+ 68	856
AAA payments	184	228	- 44	81
Cash farm receipts	919	1072	- 153	86
Other income	245	147	+ 98	167
Money borrowed	547	353	+ 194	155
Total cash received	1711	1572	+ 139	109
Home produced foods 3/	282	344	- 62	82
Total	1993	1916	+ 77	104
Expenses				
Feed	161	110	+ 51	146
Crops	145	180	- 35	81
Automobile	64	53	+ 11	121
Tractor and truck	55	47	+ 8	117
Other machinery	30	28	+ 2	107
Building and land	7	6	+ 1	116
Livestock	6	9	- 3	67
Hired labor	27	21	+ 6	129
Other (farm)	85	67	+ 18	127
Current farm cash expenses	580	521	+ 59	111
Capital goods	209	206	+ 3	101
Debt payments	425	430	- 5	99
Family living expenditures	376	362	+ 14	104
Total cash expended	1590	1519	+ 71	105
Home produced foods 3/	282	344	- 62	82
Total	1872	1863	+ 9	100

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 16 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON LARGE LIVESTOCK FARMS
(Table 6 discussed)

Average cash farm receipts for large livestock farms were $337 less than planned. Receipts from crops averaged only $94 per farm but plans showed that crop receipts of $598 per farm were expected. Other items of receipts varied not more than $40 from the plan except for cattle, other farm, and AAA payments which were $67, $113, and $66 more than planned. Receipts from dairy products were exceptional in that they were $365 per farm, $1 more than planned, and averaged $57.03 per dairy cow. Dairy products sold averaged $50.66 per dairy cow on small livestock farms, $28.29 on small crop farms, and $42.71 on large crop farms. The records available for this report did not show the kind of dairy products sold. With the dairy products sold averaging $50 or more per cow on livestock farms it is probable that some of the farmers in this group were selling whole milk or other products that were higher in price than sour cream.

The other income not from the farm was more than twice the planned for families on large livestock farms. This income averaged $291 per farm for large livestock farms, $221 for small livestock farms, $245 for small crop farms, and $333 for large crop farms. The families on the small farms had more time available to earn other income but families on large farms actually earned larger non-farm incomes because they had more equipment which they could use for custom work off the farm.

Current farm cash expenses were $141 more than planned on the large livestock farms. This group of farms was similar to the small farms in that feed expense was considerably more than planned and crop expense less than planned. Other, or miscellaneous, farm expense was $34 more than planned and tractor and truck expense $84 more than planned. Planned automobile expense usually has been insufficient but for large livestock farms the planned automobile expense was $119 per farm compared to actual expense of $118. Cash expended for debt payments and family living were not greatly different from the planned, but capital goods purchased were $134 more than planned.

Table 6. A comparison of the actual and planned receipts and expenses for 27 large livestock farms in Area 5, 1940

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	94	598	- 504	16
Poultry	27	28	- 1	96
Eggs	48	74	- 26	65
Dairy products	365	364	+ 1	100
Cattle	228	161	+ 67	142
Hogs	38	74	- 36	51
Other livestock	22	39	- 17	56
Other (farm)	171	58	+ 113	295
AAA payments	303	237	+ 66	128
Cash farm receipts	1296	1633	- 337	79
Other income	291	115	+ 176	253
Money borrowed	722	329	+ 393	219
Total cash received	2309	2077	+ 232	111
Home produced foods 3/	280	341	- 61	82
Total	2589	2418	+ 171	107
Expenses				
Feed	220	134	+ 86	164
Crops	155	236	- 81	66
Automobile	118	119	- 1	99
Tractor and truck	201	117	+ 84	172
Other machinery	51	50	+ 1	102
Building and land	11	11	0	100
Livestock	17	10	+ 7	170
Hired labor	55	44	+ 11	125
Other (farm)	142	108	+ 34	132
Current farm cash expenses	970	829	+ 141	117
Capital goods	302	168	+ 134	180
Debt payments	597	524	+ 73	114
Family living expenditures	439	423	+ 16	104
Total cash expended	2308	1944	+ 364	119
Home produced foods 3/	280	341	- 61	82
Total	2588	2285	+ 303	113

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 19 families keeping a record of farm products used in the home.

CASH RECEIPTS AND EXPENSES ON LARGE CROP FARMS
(Table 7 discussed)

The inventories indicated that there were about as many livestock on the large crop farms as on the large livestock farms but the large crop farms differed in that there were 466 acres of cropland per farm compared to 384 acres on large livestock farms and plans for the large crop farms averaged $746 for crop receipts and $554 for livestock receipts compared to $598 for crop receipts and $740 for livestock receipts on large livestock farms.

Cash farm receipts on large crop farms averaged $2001 compared to only $1296 for large livestock farms. Planned total cash farm receipts averaged $1666 for large crop farms and $1633 for large livestock farms. But actual farm receipts differed in that they were $337 less than planned on large livestock farms and $335 more than planned on large crop farms. On the large crop farms dairy products sold were $111 more than planned, other farm or miscellaneous, $136 more than planned, and AAA payments $147 more than planned.

Items of current farm cash expenses were about as planned for the large crop farms except that other machinery expense was $69 less than planned, automobile expense $68 more than planned, and hired labor $121 more than planned. All current farm cash expenses were $1135, or $24 less than planned for large crop farms compared to $970, or $141 more than planned for large livestock farms. Capital goods purchased were 69 percent more than planned for large crop farms compared to purchases that were more than planned by 80 percent for large livestock farms, by one percent for small crop farms, and by 36 percent for small livestock farms. The increased expenditure for capital goods is expected on the large crop farms because their receipts were more than planned. The departure from planned capital goods expenditures on the livestock farms cannot be entirely justified because of possible abnormal weather conditions. It appears that the needs for additional livestock and equipment were not carefully investigated for individual farms when the plans were made.

Families on large crop farms used more credit in 1940 than other groups. They borrowed $1031 per farm compared to $722 per farm for large livestock farms, $547 for small crop farms, and $542 for small livestock farms. However, larger amounts of capital goods were purchased on large crop farms than on other groups. When the amount spent for capital goods was deducted from the amount borrowed the difference in credit used on crop and livestock farms for other than the purchase of capital goods was not important except on small farms. Money borrowed per farm in excess of capital goods purchased was $402 for large crop farms compared to $420 for large livestock farms, and $338 for small crop farms compared to $222 for small livestock farms.

Table 7. A comparison of the actual and planned receipts and expenses for 8 large crop farms in Area 5, 1940.

Source of receipts or expenses	Average per Farm			
	Actual	Planned	Difference Dollars 1/	Actual Pct. of planned 2/
Receipts				
Crops	806	746	+ 60	108
Poultry	32	34	- 2	94
Eggs	83	74	+ 9	112
Dairy products	252	141	+ 111	179
Cattle	74	131	- 57	56
Hogs	64	174	- 110	37
Other livestock	41	0	+ 41	--
Other (farm)	136	0	+ 136	--
AAA payments	513	366	+ 147	140
Cash farm receipts	2001	1666	+ 335	120
Other income	333	116	+ 217	287
Money borrowed	1031	626	+ 405	165
Total cash received	3365	2408	+ 957	140
Home produced foods 3/	297	340	- 43	87
Total	3662	2748	+ 914	133
Expenses				
Feed	113	107	+ 6	106
Crops	279	325	- 46	86
Automobile	132	64	+ 68	206
Tractor and truck	196	177	+ 19	111
Other machinery	99	168	- 69	59
Building and land	8	45	- 37	18
Livestock	9	16	- 7	56
Hired labor	167	46	+ 121	363
Other (farm)	132	211	- 79	63
Current farm cash expenses	1135	1159	- 24	98
Capital goods	629	373	+ 256	169
Debt payments	966	495	+ 471	195
Family living expenditures	486	391	+ 95	124
Total cash expended	3216	2418	+ 798	133
Home produced foods 3/	297	340	- 43	87
Total	3513	2758	+ 755	127

1/ Actual minus the planned.
2/ Planned = 100 percent.
3/ An average of 7 families keeping a record of farmproducts used in the home.

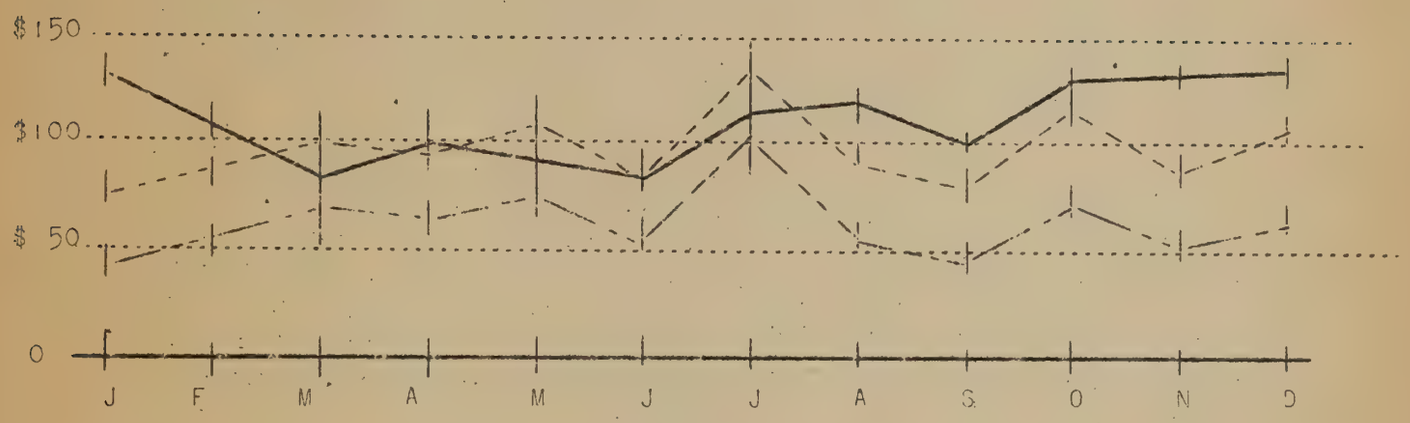
MONTHLY TRENDS OF RECEIPTS AND EXPENSES
(Figures 1 and 2 discussed)

Receipts, other than loans, were usually insufficient to meet farm and home expenses from March to July inclusive on livestock farms. Crop farms were similar in that receipts were usually less than expenses from March to June inclusive. Receipts were less than expenses in August on crop farms but probably many of the crop farmers had cash available from the sale of wheat in July to meet their expenses in August. During months when expenses are more than receipts farmers are forced to use some form of credit if they do not have cash reserves.

Receipts were more constant on livestock farms than on crop farms. Monthly receipts on livestock farms averaged $111 per month. The greatest deviations from the average were at the seasonal low in June when receipts were $26 below the average and at the seasonal peak in December when they were $23 above the average. Receipts on crop farms averaged $123 per month and the extreme variations were in August when receipts were $69 below the average, and in November when they were $105 above the average.

Farm expenses were similar to farm receipts in that they were more constant on livestock farms than on crop farms. Average monthly expenses were $64 on livestock farms. The seasonal low in January was only $20 below the average and the seasonal peak in July was only $41 above the average. Average monthly farm expenses of $62 on crop farms were only $2 below the average on livestock farms but deviations from the average were greater. At the seasonal low for crop farms in January farm expenses were $39 below the average and at the seasonal peak in July they were $49 above the average.

RECEIPTS AND EXPENSES BY MONTHS



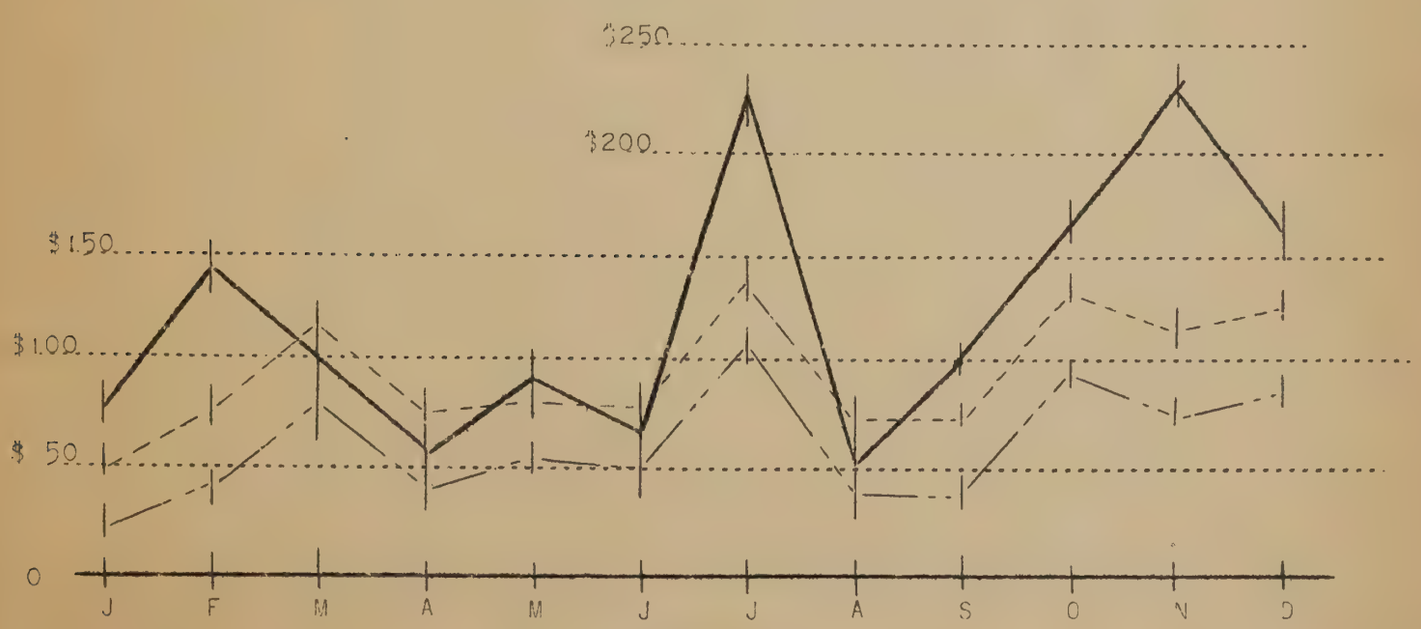
LIVESTOCK FARMS

LEGEND:

RECEIPTS (LESS LOANS)

FARM AND HOME EXPENSE

FARM EXPENSE



CROP FARMS

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS ON SMALL FARMS (Figure 3 discussed)

Twenty-seven of the 60 families on small farms decreased their net worth in 1940. Twelve of these 27 families decreased both debts and assets, 6 increased debts but decreased assets, and 9 increased both debts and assets.

Thirty-three of the families on small farms increased their net worth. Three decreased both debts and assets, 13 decreased debts and increased assets, 15 increased both debts and assets, and 2 had no change in debts but increased assets.

Change in net worth indicates the progress these families have made towards becoming rehabilitated during the year. An increase in indebtedness may be desirable if it is accompanied by an increase in net worth over a period of years. Indebtedness should be liquidated or increased depending on the circumstances of the individual cases such as the quantity and type of land, machinery, livestock, labor and management available. Major emphasis should be placed on the abilities of the individual operators to manage various sizes and types of farm businesses. The success of the FSA loan programs will depend to a great extent on the accuracy of judging the abilities of the clients. Records of physical production such as yields of crops, eggs per hen, butterfat per dairy cow, pigs per litter, percent of cows raising calves, and mortality of livestock can be of extreme importance to FSA supervisors in judging managerial ability.

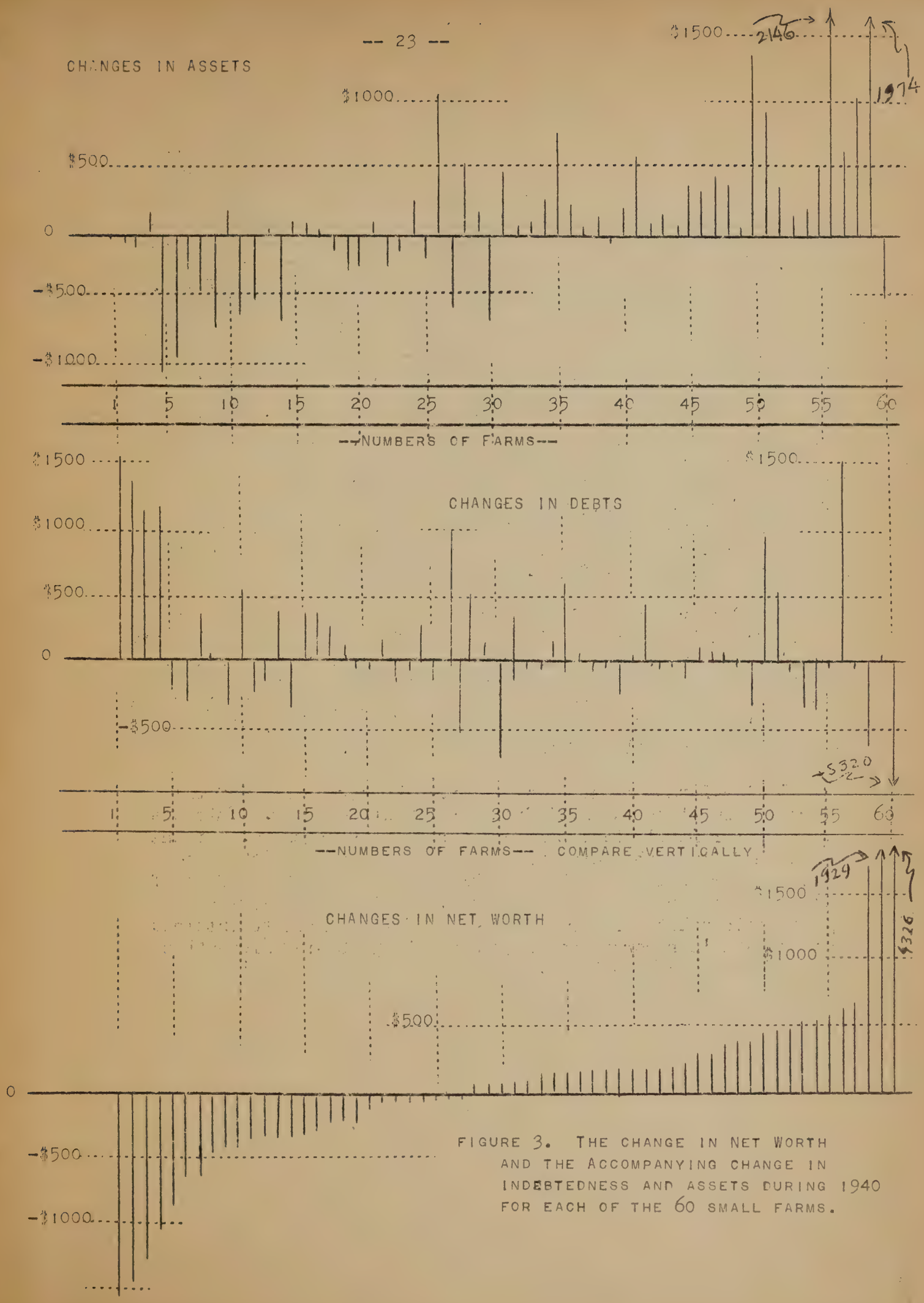


FIGURE 3. THE CHANGE IN NET WORTH AND THE ACCOMPANYING CHANGE IN INDEBTEDNESS AND ASSETS DURING 1940 FOR EACH OF THE 60 SMALL FARMS.

ORGANIZATION AND EFFICIENCY FACTORS
(Table 8 discussed)

Investments in power and machinery at the beginning of the year were greater per acre of cropland for small farms than for large farms except for the investment in power on small crop farms. However, farmers on small crop farms doubled their investment in tractors during the year while farmers on large farms made little change. Total cash machinery expense per acre of cropland was highest on small livestock farms and lowest on small crop farms. Only 35 percent of the farmers on small crop farms owned tractors compared with 60 percent of the farmers on small livestock farms. The comparison of cash machinery costs for the two groups does not take into consideration the feed consumed by the work-stock.

Total farm expense per $100 farm income was appreciably greater on livestock farms than on crop farms. Lower crop yields on livestock farms than on crop farms may have been one reason for higher expenses on livestock farms. The livestock on the livestock farms probably would have been more profitable if the farmers had grown a greater portion of the feed needed. Livestock expenses per livestock unit were approximately $4 less on crop farms than on livestock farms.

The farmers on the large livestock farms had the heaviest debt load; their debts were 103 percent of the value of their farm property. However, these farmers improved their situation during 1940 and at the end of the year their debts were approximately 96 percent of the value of farm property. The lightest debt load was on small livestock farms where farmers debts were approximately 61 percent of the value of their farm property.

Family farm earnings per farm were larger on large farms and crop farms than on small farms or livestock farms. This was also true for family farm earnings per acre of cropland. If the records had given the acres planted and harvested and the production of crops it would be possible to determine the effect of differences in crop yields on incomes. Definite conclusions as to the desirability of various types of farms cannot be obtained from one year's records that lack part of the basic information concerning the farm business.

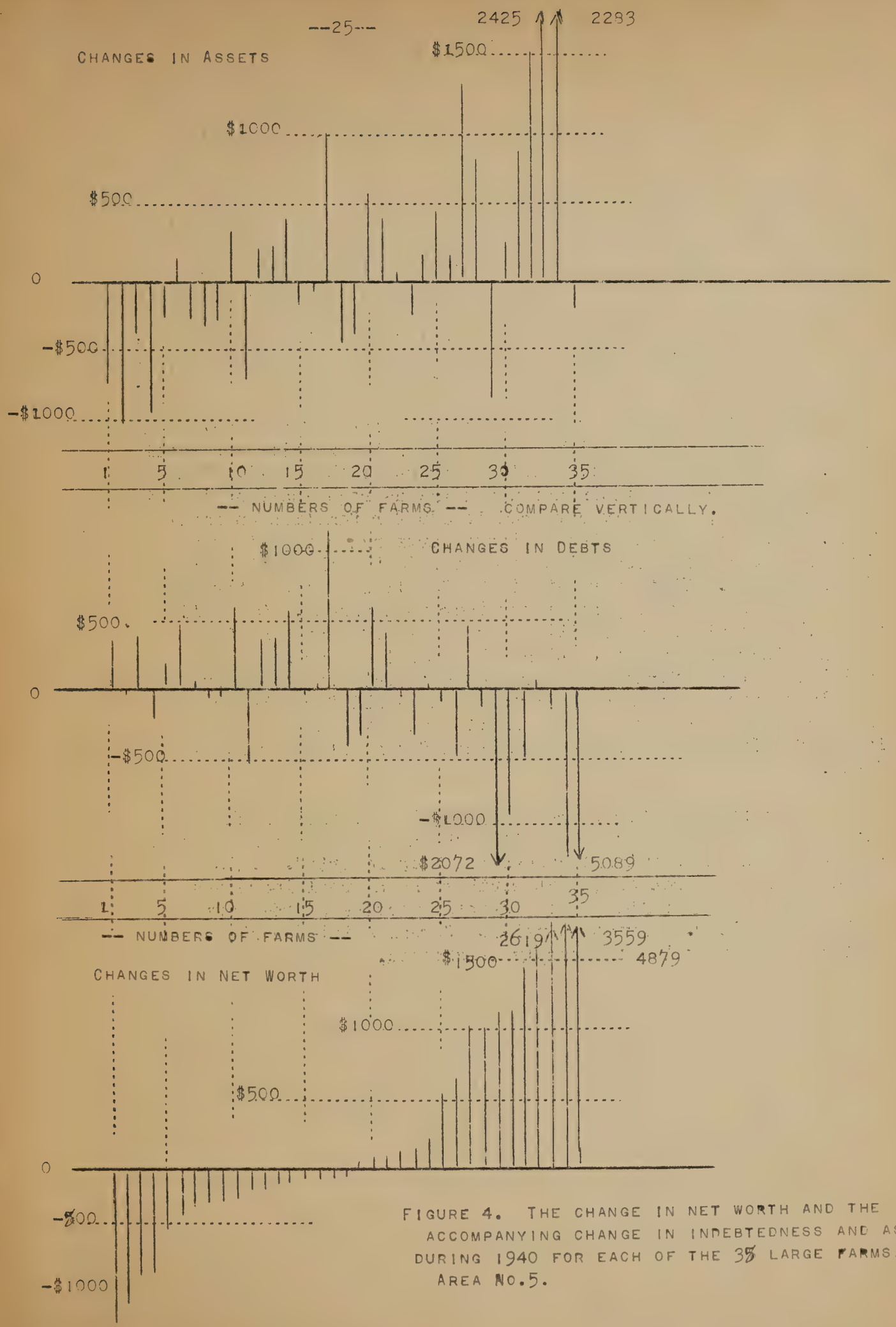


FIGURE 4. THE CHANGE IN NET WORTH AND THE ACCOMPANYING CHANGE IN INDEBTEDNESS AND ASSETS DURING 1940 FOR EACH OF THE 35 LARGE FARMS. AREA NO.5.

CHANGE IN NET WORTH, INDEBTEDNESS, AND ASSETS ON LARGE FARMS (Figure 4 discussed)

Eighteen of the 35 families on large farms decreased their net worth. Eight of the families decreasing their net worth decreased both debts and assets, 4 families increased debts but decreased assets, and 6 increased both debts and assets.

Seventeen families on large farms increased their net worth. Four of these families decreased both debts and assets, 9 decreased debts but increased assets, and 4 increased both debts and assets.

Forty-nine percent of the families on large farms increased their net worth compared with 55 percent of the families on small farms. Although a slightly smaller percent of the families on large farms increased their net worth the average increase in net worth was $415 per family compared to $78 for families on small farms. Nine of the families on large farms had gains of over $1000 in net worth which raised the average for the entire group of large farms. Sixty percent of the families on large farms had decreased debts and 54 percent had increased assets. On small farms 47 percent of the families had decreased debts and 65 per cent had increased assets. Although a smaller percent of the families on large farms had increased net worth it is concluded that large farms were more desirable than small farms because the decreases in net worth were smaller and the increases were larger for families on large farms than for families on small farms.

A few families had increased the value of their real estate in the ending inventory although there had been no changes in acreage and no new improvements had been reported. This tended to show increases in net worth where no real increases had occurred and resulted in a distorted picture of the farm business for 1940. Inventory values of real estate should reflect a normal value and rarely be changed.

Table 8. Measures of farm organization and efficiency of operation by size and type of farms, Area 5, 1940

Efficiency and Organization Factors		Small Livestock Farms	Small Crop Farms	Large Livestock Farms	Large Crop Farms	All Farms
		(Dol)	(dol)	(dol)	(dol)	(Dol)
Investment in power per acre of crop land, Jan. 1	1/	1.75	1.36	1.47	1.59	1.55
Investment in machinery per acre of crop land, Jan. 1	2/	.98	1.05	.76	.90	.89
Tractor and truck expense per acre of crop land Jan. 1	3/	.44	.30	.52	.52	.45
Total machinery expense per acre of crop land	4/	1.13	.81	.97	.92	.98
Total farm expense per $100 gross farm income	5/	74.57	56.56	73.57	67.74	69.93
Livestock expense per livestock unit	6/	23.87	19.88	18.81	11.10	20.47
Debts per $100 farm property Jan. 1		60.65	78.93	103.31	76.16	79.98
Family farm earnings per farm	7/	289	583	457	793	440
Non-farm income per farm		220	245	291	333	255
Family farm earnings per acre of crop land		1.62	3.20	1.19	1.70	1.69

1/ The investment in power is the beginning inventory of tractors and work stock.
2/ Value of tractor, truck and automobile not included.
3/ Expense does not include depreciation.
4/ Tractor, truck and automobile expense included, depreciation not included.
5/ Total farm expense includes current farm cash expense, capital goods purchased and decrease in the farm property inventory. Gross farm income includes cash from receipts, increase in the farm property inventory, and family living furnished by the farm.
6/ Livestock units are calculated from the beginning inventory of work stock, dairy cows, sows, sheep, and hens. Livestock expense includes feed purchased and other livestock expense exclusive of livestock purchased or change in livestock inventory.
7/ Family farm earnings are the cash farm receipts, increase in farm inventory, and the value of home produced foods; less current farm cash expense, capital goods purchased, decrease in farm inventory, and 5 percent interest on operators equity of farm property as of January 1, 1940.

PLANNED AND ACTUAL CASH EXPENDITURES FOR FAMILY LIVING
(Table 9 discussed)

A review of the expenditures of all the families shows that expenditures for all items of family living except food, medical care, life insurance, and "other" miscellaneous expenses were below the planned expenses.

Food expenses of the small families exceeded the planned expenses by $15 and those of the large families exceeded the planned expenses by $17. All other expenditures for both groups of families were within $10 over or under the planned expenditure with one exception, that of the item of "other" expenditures of the small families, which was $12.

The large families were almost twice as large as the small families. They spent one-fourth more for family living. For food, they spent one-fourth more than the small families. The total value of food purchased and consumed combined was also only one-fourth more.

The following summarizes briefly planning, and purchase and production of foods for the table by the families in this study. Values of foods produced 1/ by the families reporting have been interpolated with the cash purchases of foods of all of the families.

	Small families		Large families		All families	
	Planned	Actual	Planned	Actual	Planned	Actual
Total value of Food						
Consumed	$388	$373	$578	$477	$464	$416
Home Produced	262	232	418	300	325	262
Purchased	126	141	160	177	139	154

The planned total value of food to be consumed by the small families was highly comparable to that actually consumed. Their actual production of food was $30 worth short of that planned, however their expenditures for food were $15 in excess of the plan. The large families did not make up the total deficit in home production through purchase, but apparently did without. Their home production of food was $118 worth below that planned, while their purchases were only $17 above those planned.

Plans were for the small-family person to have $2.41 worth of food per week. Actually, he consumed $2.31 worth. The large-family person was to have $1.85 worth of food per week. He consumed only $1.53 worth. When consumption of food was computed on an adult male equivalent basis 2/, the small-family adult male consumed food valued at $2.87 and the large-family adult male consumed food valued at $2.08 or a difference of $0.79 per week.

1/ The farm value of home-produced food was used here.
2/ See appendix, table 1, adult male equivalent scale used to weight food consumption of family members.

Table 9 - Planned and Actual Cash Expenditures for Items of Family Living, by Size of Family, 1940, Area 5 1/

Items	Small families 2/			Large families 2/			All families 2/		
	Planned	Actual	Difference	Planned	Actual	Difference	Planned	Actual	Difference
Food	$126	$141	$+15	$160	$177	$+17	$139	$154	+15
Clothing	57	55	- 2	86	85	- 1	68	66	- 2
Personal	21	19	- 2	20	24	+ 4	21	21	-
Medical	32	38	+ 6	35	41	+ 6	33	40	+ 7
Household operation	59	52	- 7	68	62	- 6	63	56	- 7
Minor housing	3	2	- 1	3	4	+ 1	3	3	-
Minor furnishings & equipment	11	9	- 2	15	12	- 3	13	10	- 3
School, church, gifts, recrea.	24	24	-	44	35	- 9	31	28	- 3
Life insurance	16	16	-	12	16	+ 4	14	16	+ 2
Other	-	12	+12	6	12	+ 6	2	12	+10
Total	349	368	+19	449	468	+19	387	406	+19

1/ Small families: those having less than five members. Large families: those having five or more members.

2/ Total families 95 ; small families 59 ; large families 36.
Average size of all families 4.2; small families 3.1; large families 6.0
Average adult male equivalent of all families 3.3; small families 2.5; large families 4.4.

PLANNING PERFORMANCE
(Table 10 discussed)

One-fifth of the families underplanned or overplanned their expenditures in amounts in excess of $100. Underplanning of family living expenditures took place as frequently as overplanning. However, among both the small and large families underplanning was represented in larger amounts than overplanning. The average of underplanning was $92 and that of overplanning $62.

Among both the small and the large families, underplanning in excess of $100 occurred three times as frequently as overplanning in this amount. On the other hand, overplanning in amounts from $50 to $100 occurred twice as frequently as underplanning in these amounts.

While variation between planning and performance among all the families was not too great, it would appear that planning of and actual expenditures among a considerable segment of the families still retain too great a difference. Perhaps too little of the planning is done at the level of understanding of the families, or insufficient reference is made to record books kept by these families during the previous year or years.

Table 10 - Analysis of Home Planning by Size of Family, 1940, Area 5 1/

Amount under or over-planned	No. of Small Families		No. of Large Families		No. of Families	
	Under plan'	Over plan'	Under plan'	Over plan'	Under plan'	Over plan'
$1-25	8	7	6	5	14	12
26-50	5	7	2	2	7	9
51-75	5	10	2	3	7	13
76-100	1	4	3	5	4	9
101 & over	9	3	6	2	15	5
Total	28	31	19	17	47	48
Average amount	$90	$60	$94	$66	$92	$62

1/ Small families: those having less than five members. Large families: those having five or more members.

MONTHLY DISTRIBUTION OF EXPENDITURES
(Table 11 discussed)

Family living expenditures for the small families ranged from a low of $26 in each of the months of April, June and July to a high of $40 in December. Among the large families this ranged from a low of $31 in June to a high of $47 in each of the months of October and December. For trend in family living expenditures by type of farm for all families see figures 1 and 2. There is indication there that the families on livestock farms were able to distribute their living expenditures more evenly throughout the year than were the families on crop farms.

Fall and winter needs, school expenditures, and the advent of the holiday season, plus the fact that the major part of the farm receipts became available at this time of the year, contributed largely to increased family living expenditures in the period from August to December. Seasonal living expenditures of the small families varied from 21 percent of the total year's expenditures during spring months of April, May, and June to 30 percent of the total during the fall months of October, November and December. The large families spent 23 percent of the total year's expenditures during each of the seasons of winter and spring and 30 percent during the fall season.

Family living expenses were least during the months of May, June, and July, when subsistence items became available. Also contributing to this was the fact that expenditures largely peculiar to other seasons of the year were at a minimum.

Farms having several sources from which receipts are realized tend to have available a steadier income throughout the year. It is highly desirable to have such an income from the standpoint of family living; otherwise there is a tendency to reduce these expenditures during that part of the year when proper and adequate foods and other essentials are needed most.

Table 11. Monthly distribution of family living expenditures, by size of family, Area 5, 1940 1/

Month	Small families (Amount)	Large families (Amount)	All families (Amount)
January	$29	$36	$32
February	30	38	33
March	30	36	33
April	26	39	31
May	27	36	30
June	26	31	28
July	26	34	29
August	33	39	35
September	32	40	35
October	38	47	42
November	31	45	36
December	40	47	42
Total	368	468	406

1/ Small families: those having less than five members.
Large families: those having five or more members.

HOME PRODUCED FOODS
(Table 12 discussed)

Ninety-two percent of the total value of foods produced from the farm by the small families and 91 percent of that produced by the large families came from livestock and livestock products, the balance from gardens and orchards. It was planned that the small families would obtain 83 percent of the total value of home produced foods from livestock and livestock products items. The large families were expected to obtain 85 percent from these sources. From the fore-going it would appear that the families did not make as much use of products from the plant kingdom as was considered essential to a well-balanced "live at home" program. There would seem little reason for the families not raising and making greater use of vegetables and fruits, except that perhaps some families are slow in adopting this phase of the home-production program in asmuch as it differs somewhat from their past practices and from what other families in the neighborhood are doing.

A greater difference existed between the planning and the actual production of foods among the large families than among the small families. This held true for practically all of the items.

Livestock and livestock products showed the least differences between planning and production and particularly so among the small families. Greater differences occurred among the garden products. It was among the small families that production and consumption exceeded the plan in any of the items; namely, cream, poultry, and eggs.

The total value of food produced 1/ and purchased by the small families was $373. Sixty-two percent of this was home produced. That purchased and produced by the large families was valued at $477. Sixty-three percent of this was home-produced. These percentages are still considerably below the home-production "benchmark" (75 percent of the total value of food consumed) being recommended by the Farm Security Administration. If it had been necessary for the small families to purchase all of the food which they consumed, the cost would have been $499 and to the large families the cost would have been $638.

Production of foods from the farm for table use cannot be emphasized too strongly. Livestock and livestock products items supplemented by a plentiful supply of fruits and vegetables will go far toward assisting the families to become self-sustaining. It will enable the use of certain resources for satisfaction other than biological necessities.

1/ The farm value of home-produced food is used here.

Table 12 - Summary of Home Produced Foods Planned and Used by the Family, by Size of Family, 1940, Area 5 1/

Item	Unit	Small families 2/ Plan'	Small families 2/ Used	Small families 2/ Farm value	Small families 2/ Retail value	Large families 2/ Plan'	Large families 2/ Used	Large families 2/ Farm value	Large families 2/ Retail value	All families 2/ Plan'	All families 2/ Used	All families 2/ Farm value	All families 2/ Retail value
Milk	gal.	354	348	$73	$125	604	490	$103	$176	456	406	$85	$146
Cheese	lb.	19	13	2	3	25	22	3	5	22	17	2	4
Butter	lb.	85	70	19	24	140	109	30	37	107	86	23	29
Cream	gal.	10	22	26	40	25	15	18	27	16	19	23	34
Lard, fat pork, bacon	lb.	124	102	12	15	194	156	19	24	153	124	15	19
Lean pork	lb.	211	182	29	44	301	243	39	58	247	207	33	50
Beef, veal	lb.	136	90	15	22	199	106	18	27	162	96	16	24
Mutton, lamb	lb.	-	-	-	-	-	-	-	-	-	-	-	-
Fish, game	lb.	2	-	-	-	4	-	-	-	-	3	1	1
Poultry	lb.	88	95	20	26	128	103	22	28	104	98	21	27
Eggs	doz.	133	139	17	22	197	187	22	30	159	158	19	25
Dried beans and nuts	lb.	47	21	1	2	85	27	1	2	63	23	1	2
Tomatoes	lb.	243	142	4	10	300	195	6	14	266	164	5	12
Leafy green and yellow vegetables	lb.	290	143	4	7	536	207	6	10	390	169	5	9
Other vegetables	lb.	455	158	5	9	648	239	7	14	534	191	6	11
Fruit	lb.	95	78	2	3	95	37	1	1	95	61	2	2
Potatoes	lb.	219	45	1	1	126	49	1	2	181	47	1	1
Sweet Potatoes	lb.	27	5	-	-	193	83	3	4	95	37	1	2
Flour	lb.	38	25	-	1	113	50	1	2	69	35	1	1
Cereal	lb.	8	3	-	-	15	2	-	-	10	2	-	-
Meal	lb.	1	2	-	-	19	1	-	-	8	2	-	-
Syrup, sorghum & honey	qt.	2	18	2	4	8	-	-	-	4	11	2	2
Total		xx	xx	xx	232 3/358	xx	xx	xx	300 3/461	xx	xx	xx	262 3/ 401

1/ Small families: those having less than five members. Large families: those having five or more members.
2/ Total families reporting 76; small families 45; large families 31.
3/ Farm value of home produced foods planned by all families $325; small families $262; large families $418.

CONSERVED FOODS
(Table 13 discussed)

An average of 157 quarts of fruits, vegetables, and meats was carried over from the previous year by each of the families. The small families carried over 140 quarts and the large families 182 quarts. This quantity of carry-over was sufficient to provide only one quart of conserved foodstuff per day until the next fresh fruit and vegetable season, which begins in June. Unless supplemented by a large quantity of dried and stored foodstuffs, this could not be considered adequate to provision the families with a well-balanced diet, and particularly so during the time of the year when family living expenditures, including those for food, were being kept at a minimum. Since the Farm Security Administration is emphasizing the importance of carrying over a quantity of foodstuffs sufficient for a full year's needs beyond the next fresh fruit and vegetable season so as to compensate for any deficiencies that might occur due to drought or other adverse conditions, it follows that every effort should be made by the families to increase the quantity of foodstuffs conserved.

During 1939, 42 FSA client families in the Texas Panhandle who made reportings conserved an average of 357 quarts of fruits, vegetables, and meats. The families in this study conserved an average of 311 quarts. This is a slight decrease over the performance of the families studied during the previous year.

Plans that the small families made exceeded by 74 quarts the quantity of foodstuffs actually conserved during the year. A slightly wider margin was found among the larger families who fell short of their conserving program by 89 quarts. The greatest differences between planning and performance by the families occurred in the item of vegetables. Conserving of jams, jellies, pickles, and kraut, as well as the preservation of meats through the smoking and salting processes, was in excess of the plan.

TABLE 13 - SUMMARY OF CANNING ACTIVITY, BY SIZE OF FAMILY, AREA 5 1/

Item	Unit	Small families 2/			Large families 2/			All families 2/		
		On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.	On hand begin'	Planned to conserve	Conserved during yr.
Canned:										
Tomatoes	qt.	11	51	36	21	65	51	15	56	42
Vegetables	qt.	48	144	76	50	232	166	49	179	112
Fruit	qt.	57	89	73	90	131	89	70	105	79
Fruit juice	qt.	5	9	9	5	15	10	5	11	10
Meat	qt.	12	22	15	8	35	28	11	27	20
Jam & jellies	qt.	1	2	15	1	5	17	1	3	16
Pickles	qt.	5	6	21	6	8	38	5	7	28
Kraut	qt.	1	-	4	1	1	4	1	1	4
Total	qt.	140	323	249	182	492	403	157	389	311
Smoked & salted meat	lb.	66	76	140	66	103	233	66	86	177

1/ Small families: those having less than five members. Large families: those having five or more members

2/ Total families reporting 79 ; small families 48 ; large families 31.

HOUSEHOLD INVENTORY
(Table 14 discussed)

The value of the household inventory of the small families exceeded by $12 that of the large families. Too, the total value of their clothing was $4 greater than that of the large families. The large families did show a greater frequency of some of the large items than did the small families; however, these are ones which are usually determined by size of family. The large families had hardly enough seating equipment in the form of chairs and rockers for their numerical size. Neither did they have as many lincleums and rugs as the small families.

Three out of five families had radios and sewing machines; one-half reported refrigerators; and four out of five reported pressure cookers. Except for lack of some items, the families seemed to have adequate furnishings and equipment to take care of their needs; however, it is quite certain that the large families will have to make replacements sooner than the small families.

Inasmuch as many of the families possess sewing machines, it is apparent that many women are supplementing clothing purchases with homemade items of clothing. Since most of the families are equipped with pressure cookers, they are prepared to conserve foodstuffs in the best approved manner and with the least risk of spoilage. It would seem good economy for those families who do not possess sewing machines and pressure cookers to purchase them.

Table 14. Inventory of household items, by size of family, 1940, Area 5 1/

Item	Small families 2/	Large families 2/	All families 2/
Single beds	.1	.1	.1
Double beds	2.2	2.9	2.4
Single mattresses	.1	.1	.1
Double mattresses	2.5	3.3	2.8
Blankets, etc.	1.9	1.7	1.8
Comforts & quilts	8.9	10.8	9.7
Davenport or couch	.5	.6	.5
Chest of drawers	1.5	1.4	1.5
Straight chairs	5.4	5.4	5.4
Easy, rockers	1.4	1.1	1.4
Dining tables	1.0	1.1	1.1
Other tables	1.1	1.1	1.2
Cupboards	.8	.8	.8
Radios	.6	.6	.6
Rugs	.4	.3	.4
Linoleums	1.5	1.3	1.5
Refrigerators	.5	.4	.5
Sewing machines	.5	.6	.6
Pressure cookers	.7	.8	.8
Jars	185	176	182
Value of clothing	$47	$43	$45
Value of household inventory	$330	$318	$308

1/ Small families: those having less than five members
Large families: those having five or more members
2/ Total families reportion 90: small families 55; large families 35.

APPENDIX

Table 1 CONSUMPTION UNIT SCALE

Age in years	Child	Weights in terms of Adult Male Boy or man	Girl or woman
1.	.4		
2.	.5		
3.	.55		
4.	.6		
5.	.65		
6.	.75		
7.	.75		
8.	.8		
9.	.8		
10.	.85		
11.		.95	.85
12.		.95	.95
13.		1.0	1.0
14.		1.0	.95
15.		1.05	.9
16.		1.15	.85
17.		1.1	.85
18 to 59		1.0	.95
60 and over		1.0	.9

Adopted from scale of weighing food consumption published by E. L. Kirkpatrick, Rosalind Tough and May L. Cowles in "How Farm Families Meet the Emergency", Wisconsin Agricultural Experiment Bulletin 126.